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The For-Hire Trucking Industry in the Atlantic Provinces

Provincial Case Studies

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THE FOR-HIRE TRUCKING INDUSTRY IN
ATLANTIC PROVINCES

Provincial Case Studies

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FOREWORD

This report contains four separate studies of trucking in the provinces of Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland, respectively. The purpose of these studies is to discuss the economic environment in which the trucking industry operates and to analyze the economic performance of the industry in each province. Although the present studies were undertaken to meet the overall internal needs of the Canadian Transport Commission, they are being released as a contribution to knowledge and discussion of the trucking industry.

Whenever possible the Commission makes publicly available the results of its research and the present volume is offered in line with this policy. These studies were prepared by independent consultants and the opinions expressed are, of course, those of the authors and do not necessarily reflect the views of the Canadian Transport Commission.

Yves Dubé
Vice-President (Research)

Canada

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THE FOR-HIRE TRUCKING INDUSTRY IN THE ATLANTIC PROVINCES

CASE 1

THE TRUCKING INDUSTRY IN THE PROVINCE OF NOVA SCOTIA

Economic and Regulatory Aspects

Prepared by

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Acadia University
February, 1982

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The author would like to express his appreciation to Peter Woolaver for his painstaking work and assistance in the collection of the data and calculations carried out and Cheryl MacDonald for her patience and the typing of various drafts of the paper.

The author, however, bears sole responsibility for the analysis and any deficiencies in the text.

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Chapter 1

INTRODUCTION

Transportation plays a key role in determining the degree of integration which exists in an economy. The availability and reliability of a transportation network to move goods, services and people is both a cause and a result of sustained growth.

Numerous factors influence the transportation network in the Atlantic provinces, and Nova Scotia in particular. These include a small domestic market, the lack of urban agglomeration, the existence of small scattered communities, the region's location on the Atlantic coast, and its proximity to the United States.

The Nova Scotia economy has sometimes been characterized as a less developed region in a developed economy, with the two major forces for growth being the export base of the region and the large injection of funds by the Federal Government. While these two factors are still important to the economy of this province, there have been developments over the last decade which tend to make this general assertion less factual.

Historically, the dynamic sectors have been the primary and secondary commodity producing sectors (agriculture, fishing, mining, forestry and manufacturing), though over the last few years there has been growth in the transport and other service sectors. The five main industries mentioned above account for the major proportion of goods being carried. In terms of exports in 1978 fish, foodstuffs and wood products accounted for approximately 60% of all exports; while for imports, industrial, electrical and marine equipment, construction material, foodstuffs and steel represented approximately 50% of the total.

In a study of the trucking industry in Nova Scotia, it is appropriate to review, albeit briefly, certain features of the economy of this province. With a population of approximately 850 000, Nova Scotia accounts for the largest output of the Atlantic provinces. In 1979, with a labour force of 352 000, Nova Scotia had a Gross Domestic Product of $5 847 billion and a personal per capita income of $7 183.

Although 16 towns and cities have a population over 5 000, only Halifax, Dartmouth and Sydney have a population in excess of 30 000. One of the marked features of the Nova Scotia economy is the diffusion of towns of a reasonable size at distances of approximately 30-50 miles apart. This spatial dimension with attendant industrial disaggregation requires good transportation links.

The economy of Nova Scotia has a narrow industrial base, with a significant proportion of the output being exported from the province in a raw or semi-finished state. This has led to the search for newer, more dynamic scientifically based industries to locate in the province towards the goal of a more diversified economy.

Notwithstanding the fact that the industrial base of Nova Scotia is represented by a relatively small number of firms, the importance of the transport sector as measured by employment is indicated by the estimate of 16 000 workers in this sector out of a total 316 000 workers in the province in 1979. (See Appendix B, Table I).

At present, the trucking industry competes with railways, airlines and container shipping for market shares. Railways have recently lost some of their share of the low bulk, high value cargo market to the trucking industry, and air freight carriers have also attempted to increase their share of this type of cargo. This development has, however, not affected the Atlantic region too greatly because the volume produced of this type of cargo has not been too great, in addition to the shippers not being too familiar with the type of available transport service.

How does a trucking industry exist in an economy which exports most goods in a raw or semi-finished form and where a large segment of the said cargo consists of low bulk value goods? One reason is the dispersion of the population and the towns in the province. Furthermore, in addition to the number of employees in the transport sector, transportation costs are a necessary and significant input into most sectors of the economy.

This raises the question of rate structures. Like high tariffs, high transportation rates can protect one market from the entry of goods from another market. In a recent report it was suggested that transportation rates should be restructured in such a manner as to equalize transportation costs, to provide greater access to Canadian markets, to encourage the inflow of raw materials into the region and the outflow of final products out of the region. [1] There are two problems to the preceding argument however. First, although westbound and internal transportation subsidies work generally to the benefit of Nova Scotia, equalized transport costs would help others to compete in Nova Scotia as well as Nova Scotian companies competing in their areas. Second, transportation costs as a proportion of the final costs of manufactured goods represent only about 3 - 4% of the cost of goods sold by Nova Scotia firms.

While all modes of transportation (truck, train, air and ship) have a role in the Nova Scotia economy, the significance of the trucking industry has increased as more manufacturing firms develop and certain rail services are reduced. In a recent study on containerized cargo, it was found that trucking was the primary mode used to service the market or origins of major products, both exports and imports. [2] (See also Appendix B, Table II).

NOTES

[1] Atlantic Provinces Economic Council. The Atlantic Vision - 1990, Halifax, 1979.

[2] CMTC, Supplemental Report to Nova Scotia Importers and Exporters, October 1979.

Chapter 2

REVIEW OF GENERAL REGULATIONS

In Nova Scotia, the terms and conditions for the operation of all motor vehicles are set forth in a number of provincial regulations and Acts (Motor Carrier Act, Motor Vehicle Act, Public Highways Act).

The contribution of highway carriers to the financing of the road network is reflected through registration fees and fuel taxes. It has been pointed out in earlier studies that the levy of registration is a function of an essential characteristic of road transport networks namely, that under-utilization below the full capacity potential will give rise to decreasing costs. [1] Given the fact that fixed costs represent a major segment of total costs of a road network, it would thus seem more appropriate to secure financing for the network by levies which are to a degree independent of usage.

However, the underlying rationale is one whereby an attempt is made to calculate the proportion of fixed costs attributable to each vehicle. This model is expanded to the "gradualist method" which calculates what investments and other fixed costs are made for each type of vehicle based on weight, width, dimension and number of axles.

Table 1 shows the present structure of motor carrier fees which is based on gross vehicle weight.

Table 1

MOTOR CARRIER FEES

Highway tractor	
- up to 20 000 lbs G.V.W.	$ 50.00
- from 20 001 to 42 000 lbs G.V.W.	$ 60.00
- from 42 001 to 60 000 lbs G.V.W.	$ 80.00
- exceeding 60 000 G.V.W.	$100.00
Straight truck	
- up to 8 000 lbs G.V.W.	$ 15.00
- from 8 001 to 12 000 lbs G.V.W.	$ 20.00
- exceeding 12 000 lbs G.V.W.	$ 45.00
Temporary authority (valid 30 days) one-half annual fees	
One trip authority	$ 20.00

Source: M.C.A. pp. 114-115.

2.1 Vehicle Size and Weights

The imposition of vehicle size and weight or load limitations can be equated to regulations at the input level. The maximum size of vehicles that can be operated on the highways in Nova Scotia is stated below:

	Feet
Length-single vehicle 3-axle	40
Length-overall combination	65
Width	8½
Height	13½

It should be pointed out that these requirements are generally similar to those in effect for all Maritime Provinces.

In Nova Scotia a level of tolerance of 500 kilograms per axle is generally accepted, though exceptions are made for specific highways. [2] The maximum total loaded weight allowed varies between 13 500 and 50 000 kilograms depending on proper axle spacing, tire size, and vehicle configuration as shown below (Table 2). Carriers who are transporting loads approximating the maximum permissible are normally restricted to certain designated highways.

Table 2

GROSS VEHICLE WEIGHTS ON SCHEDULE "C" HIGHWAYS

	Maximum Gross Weights Permissible Kilograms	Scaled Fees
Single Axle Truck	13 500	$ 356
Tandem Axle Truck	21 500	598
Single Real Axle Tractor and Single Axle Trailer	22 500	634
Single Axle Tractor Tandem Axle Trailer	31 500	874
Tandem Axle Tractor and Tandem Axle Trailer	39 500	1 078
Tandem Axle Tractor and Tri-Axle Trailer	48 500	1 318
Tandem Axle Tractor and Two trailers with 4 axles (total)	50 000	1 354

Source: Motor Vehicle Regulations, Part II, March 1980.

In addition to the motor carrier fees, there are scaled fees which increase in proportion to the weight of the load (see Appendix B, Table III for greater details). The latter scaled fees (registration) are collected by the Motor Vehicle Branch as contrasted to the motor carrier fees being collected by the P.U.B. The latter principle is based on the concept that the user should pay a difference to offset the cost arising from his utilization factor. It is apparent that the principle of a graduated fee scale is applied in Nova Scotia as in other Canadian provinces. [3]

The enforcement of regulations pertaining to the total loaded weight has been less than rigorous, due to the limited number of inspectors and scales. The hours of operation of the scales are also well known to carriers who can thus circumvent the effectiveness of the controls.

Furthermore, a firm may obtain a special permit which allows it to exceed the general limitations as set forth. The fee paid for such a special permit does not adequately reflect the potential costs which might arise from further deterioration of the road.

2.2 Insurance and Safety

The insurance and bonding requirements for motor carriers in Nova Scotia are stated in the Motor Carrier Act and Regulations. In addition to the requirements stipulated by the Act, all motor carriers shall have a motor vehicle liability policy of insurance issued by a company authorized to issue such a policy in the province of Nova Scotia. This policy shall be in a form approved by the Superintendent of Insurance for the province and provides third party coverage in respect of liability for loss or damage to the limit of at least $35 000 (excluding of interest and costs) under an inclusive coverage for each freight vehicle used. [4]

Other aspects of insurance and bonding for the protection of freight covering liability for loss or damage to freight due to fire, collision, tornado, cyclone, overturning and theft are set forth in sums prescribed by the Board. [5] It is also possible to secure exemption in the case of self-insurance. [6]

All the conditions of carriage and the liability of the carrier are prescribed in a comprehensive set of regulations [7] and must be included in every bill of lading which must be issued for each shipment.

2.3 Gasoline Tax

The province of Nova Scotia is a participant in a reciprocal gasoline tax agreement effective in the Maritime Provinces, whereby duplicate fuel tax can be avoided. Under statutes governing gasoline and fuel taxes, with the proper forms completed, a redistribution of the tax is facilitated where an operator has an imbalance in the purchase of fuel between one province (over-bought) and other provinces (under-bought).

In Nova Scotia the provincial gasoline tax was first allocated to a specific Road Account, but since 1965 it has gone into the general revenue fund of the province. Over the years, the tax per gallon has remained relatively unchanged.

Type of Fuel	1961	1969	1979
Diesel	27¢ per gal.	27¢ per gal.	6¢ per litre or 27.27¢ per gal.
Gasoline	27¢ per gal.	21¢ per gal.	4.7¢ per litre or 21.36¢ per gal.

It would appear that the transport industry, e.g., for-hire trucking, has therefore gained indirect benefits with a constant rate while conjointly enjoying improved vehicle efficiency (ton miles/per gallon), transporting larger loads and utilizing better highways. Nonetheless, it has been estimated in different Canadian and U.S. studies dealing with the allocation of maintenance costs to different types of vehicles, that fuel taxes yield revenues which are greater than the actual variable cost burden or support required by a highway department. [8]

2.4 Federal/Provincial Jurisdiction

Labour legislation in Canada is very fragmented, with most of the control delegated to provincial jurisdictions. In terms of the Canadian Labour legislation and the trucking industry, added difficulties arise from (a) 40% of the industry being employed in extraprovincial companies that fall under the Canadian Labour Code and (b) the trend towards increased restriction of federally regulated companies or firms. [9] It is further stated that the intraprovincial non-union carrier has a considerable advantage over the extraprovincial carriers (operators).

The Canada Labour (Standards) Code passed in 1965 is the relevant legislation which applies to the trucking industry. The sections of the Canada Labour Code most relevant to motor carriers are:

Part III - deals with standard hours, wages, vacation and holidays

Part IV - deals with safety of employees

Both of these parts of the Code have pertinent regulations: Part III (a) Canada Labour Standard Regulations deals with hours of work, wages, annual vacations, general holidays, maternity leave, group and individual termination of employment and severance, (b) Motor Vehicle Operators Hours of Work Regulations pertains to hours of work standards for employees engaged in the transport of goods, passengers and mail by motor vehicle.

Part IV of the Canada Motor Vehicle Operators Hours of Service Regulations considers hours of service for motor vehicle operators engaged in interprovincial trade or the transportation of mail and the returns to be made by motor carriers.

The difficulty in the application of the legislation especially in terms of standard hours limitations is well known. To resolve the dilemma there have been a number of commissions, Murchison in 1967, 1971, 1972 and Gallagher in 1976.

The crux of the problem is clearly identified below by the following statement from the Canadian Trucking Association:

> "A major concern for truckers subject to the Federal Labour Code is that they have to compete for much of their business with other truckers who come under provincial jurisdiction. Approximately 25% of "for-hire" industry in Canada is between provinces, while something like 2/3 of the business done by the industry is conducted by extra-provincial carriers subject to federal jurisdiction. This is attributed to the fact that most of the large truckers engage in extra-provincial operations and therefore are subject to the Federal Labour Code even when hauling goods between points within a province."

After a number of revisions in 1971, and 1972, recommendations through an Order in Council were passed in October 1972. As shown below, the hours of work standards for employees engaged in the transport of goods, passengers and mail by motor vehicle is divided into three (3) classes. Despite the hours indicated for all three classes, the total hours may be exceeded.

	Daily	Weekly
Bus Operators & City Motor Vehicle Operators	9 hrs.	45 hrs.
Highway Motor Vehicle Operators	No more than 10 hours driving in any shift. No more than 15 hours on any shift. In addition operators may not remain on duty for more than 70 hours in any period of 8 consecutive days.	

Further amendments to Bill C-8 (Chapter 27 Statutes of Canada 1977-78) were passed in April 1978 which incorporated aspects such as holidays and safety. While the goal of the Bill C-8 was to "improve the working environment in general and the collective bargaining process", it should be noted that the trucking industry fought without success against the amendments in 1978, stating costs would be increased through raising minimum standards and an attempt of unions to try to reinstate the differential between the minimum standards and that of the collective agreements.

It would appear some of the fears expressed by the Canadian Trucking Association such as (a) the trend to increased concentration in the trucking industry, (b) encourage a shift to private trucking (c) lower productivity for extraprovincial trucking, have been valid.

In Nova Scotia the wage rates for the "for-hire" trucking industry are above the minimum wage called for by the Minimum Wage Orders and so the latter legislation re hours of work is not applicable. Employees in the trucking industry may work longer hours than workers in other industries. In Nova Scotia, the maximum established hours for trucking are the same as those established by the Federal legislation; with enforcement traditionally carried out by the provincial Motor Vehicle Division though funded by the Federal government. However, recent cutbacks in this funding have rendered enforcement measures for the most part inoperative.

Finally, a noteworthy factor is that while the trucking industry as a whole in Canada is fairly heavily unionized, in Nova Scotia and the Maritimes, there are significantly large segments of the industry not heavily unionized. Conjointly, there is no major multi-employer bargaining group in the Maritimes as there is in western and central Canada.

2.5 Interprovincial Vehicle Registrations

In general, the province of Nova Scotia grants full reciprocity, with minor exceptions, to vehicles registered in other provinces of the Atlantic region on the condition that the said vehicle is not used in intraprovincial operations.

A significant recent development by the Canadian Conference on Motor Transport Administrators (CCMTA) is the pro-rating agreement in terms of registration which was approved by the provincial Ministers responsible for Road Transportation and Safety at a conference held in Toronto last October, 1980.

Briefly, under the agreement truck owners will license their vehicles in home provinces and pay a prorated portion of the full applicable provincial fee based on an estimate of the mileage to be travelled in a province.

Six provinces, New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia will put the agreement into effect by April 1981 and Québec, Nova Scotia and Newfoundland by April 1982.

NOTES

[1] Z. Haritos. Rational Road Pricing Policies in Canada, Canadian Transport Commission, Ottawa 1973.

[2] These are the Schedule "C" highways which include all 100 series roads in Nova Scotia, plus major trunk routes.

[3] Statistics Canada. Motor Vehicle, Part I, Rates and Regulation.

[4] Sec. 47 Motor Carrier Regulation.

[5] Secs. 48-50 M.C. Reg.

[6] Subs. S. 22(4) and (5) M.C.A. The self-insurer maintains continuous solvency in his "insurance fund or reserve".

[7] S. 83, S. 96 and S. 103 M.C. Reg.

[8] Michel Boucher. Economic Analysis of Regulations Governing the Trucking Industry in Québec, Canadian Transport Commission, 1979, p. 5.

[9] Transport Canada. Competition and Regulation in Canadian Transportation, Volume 1, The Public Sector, p. 134.

Chapter 3

ENTRY AND RATE REGULATION

3.1 Regulatory Framework

The regulation of motor carriers has traditionally been the responsibility of provincial governments. However, there was some question on the degree of provincial jurisdiction in trucking. This was resolved in The Privy Council decision on the Winner Case, which ruled that the B.N.A. Act gives the Federal Government jurisdiction over extraprovincial transportation undertakings. Subsequently, however, the Federal Government passed the Motor Vehicle Transport Act in 1954 and formally delegated its regulatory powers to the provinces. [1] Part III of the National Transportation Act of 1967, however, provides for Federal regulations of extraprovincial undertakings, though it has not yet been proclaimed for trucking.

In general, the provinces have divided the motor carrier industry into two broad jurisdictional categories:

a) extraprovincial motor carrier operation - a for-hire motor carrier whose business undertakings involve transporting goods between two or more provincial boundaries or into the U.S.

b) intraprovincial motor carrier operation - a for-hire motor carrier whose entire business undertakings are confined within one provincial jurisdiction.

Although the majority of provinces enacted regulations during the 1930's to control for-hire trucking because of the general disarray in the industry, legislation was not enacted in Nova Scotia until the mid 1950's.

In Nova Scotia, under the authority of the Motor Carrier Act (M.C.A.) and attendant regulations, the Board of Commissioners of Public Utilities administers the economic regulation of motor vehicle freight transport for compensation. [1] Furthermore, the provisions of the Public Utilities Act (P.U.A.) regarding the practice and procedure apply to the Board when acting under the M.C.A. [2] The latter condition applies in conjunction with both the Motor Vehicle Act and the Public Highways Act. [3]

In addition, the Board is responsible for general supervision over motor carriers (licensing included), can approve rates with respect to public passenger vehicles, and make regulations on such matters as filing of reports, obligations of carriers and the control of drivers. [4] It is significant, however, that a license, if granted by the Board, does not create for the holder an exclusive or perpetual right. [5]

The Board consists of seven persons appointed by the Governor in Council, two of whom are designated Chairman and Vice-Chairman. Members of the Board are deemed public employees and must be free from conflict of interest. If not, their positions are declared vacant. [6]

Prior to examining some aspects of regulated carriage in Nova Scotia, it has to be noted that there are a significant amount of goods which fall into the unregulated or exempt category. Although it is a general principle that every "motor carrier" which is operating for hire on a highway must secure a license from the Board, [7] there are a number of exemptions as listed below: [8]

(a) motor carrier with no more than two two-axle straight trucks; and

(b) motor carrier that carries

- (i) sand, gravel, earth, rock, fill and asphalt mix;
- (ii) highway construction and maintenance materials;
- (iii) salt, limestone or fertilizers, in bulk or bags;
- (iv) fresh herring, unprocessed round fish or fish offal;
- (v) logs, pulpwood, wood chips; and
- (vi) pit props, poles and unprocessed trees or other unprocessed forest products.

In addition, the Board has the power to enact regulations which facilitates other exemptions for a class of vehicle. [9]

3.2 Economic Regulation

For non-exempt freight operations, all freight vehicles which transport for-hire are subject to economic regulation of entry control. [10] A license issued by the Board is an authority to an individual, partnership or company and is not subject to annual renewal or re-issuance. [11] However, to operate a freight transport business, a carrier must have a certificate of authorization and a motor carrier identification plate for each vehicle which operates under the authority of the license. Both the certificate and the plate, which is issued by the Board, have to be renewed yearly. [12]

Anyone who desires to provide a freight transport service must apply under the form of a petition under the P.U.B. and submit the information as required by regulation. [13] This is followed by the applicant advertising his application in the Royal Gazette to allow other affected parties to oppose the application. [14] After what is deemed a reasonable time, the Board shall consider and set the time and place for a hearing; upon which decision the applicant gives notice in the Royal Gazette. [15] With the issuance of the license, the decisions of the Board become effective; but the applicant must first have filed a bond, paid for vehicle plate fees, and have effected motor vehicle liability insurance and cargo insurance policies. [16]

3.3 Extraprovincial Carriers

With regard to the regulatory conditions pertaining to extraprovincial carriers, the information required from an extraprovincial licensed corporation includes the certificate of incorporation, the names and addresses of officers, the names of the ten (10) largest shareholders and the number of shares held by each of them. The aforementioned practice does not stem from a policy that has been recently stated but rather from a practice established long ago.

3.4 Regulatory Environment and Interpretation

In contrast to the regulatory environment in certain other provinces, e.g., British Columbia, the P.U.B.'s prime responsibility does not appear to lie in economic regulation of the motor carrier industry through specific criteria, such as:

(a) adequate and efficient service at reasonable rates;

(b) the promotion of safety on public highways; and

(c) the fostering of sound economic conditions in the transportation business.

Rather, decisions arrived at by the Board are based on the following criteria:

(a) sufficiency of service already provided by opponents, whether highway, water, air or rail service;

(b) possible excess of facilities over requirements;

(c) general effect of license on transport service and effect on public interest;

(d) quality and permanence of proposed service; and

(e) fitness, willingness and ability of applicant to provide proper service.

The Board has a great deal of discretion in the interpretation of the criteria, and is not required to give a written decision or its reasons for a position taken. If a person decides to appeal the decision of the Board, this appeal falls within the jurisdiction of the Appeal Division of the Superme Court of Nova Scotia by permission of a judge, and can only be on matter's of jurisdiction or law. [17]

It is apparent that in Nova Scotia the thrust of the regulatory dimension is directed to the entry level as administered by the P.U.B. The latter has the power to specify routes and areas of freight transport operations [18] and thus to restrict the service a licensed carrier may provide to the terms and conditions as specified by the license, the Act and regulations. [19] A full description of the regulations to which restrictions can be imposed is given in Appendix A. [20]

Pricing is done by each freight carrier filing schedules of their rates with the Board. [21] The P.U.B. has no direct control over freight rates; [22] in effect, being mainly a filing office and enforcing compliance with filed rates. A change in the rates may be implemented by a carrier so long as it is filed with the Board within 15 days after the change becomes effective.

An exception to the general concept indicated in the preceding paragraph, with respect to control over freight rates, may occur at the time of an application for operating authority being assessed by the Board. However, it is an item of low priority as entry assessment tends to be centered mainly on the profitability and viability of the proposed service.

It is apparent that in Nova Scotia, the P.U.B. uses entry control as the primary tool to regulate for-hire trucking. No one carrier will have a monopoly on a route. [23] The accent is thus on the structure of the industry which can be both advantageous and disadvantageous.

According to the Chairman, the P.U.B. has a primary obligation to shippers and consumers, with a secondary obligation to the individuals or companies engaged in the trucking business.

The P.U.B. appears to prefer the flexibility accorded by the current criteria in judging an application, with respect to entry, and it would seem reasonable to assume that the Board does make some trade-offs between the expected benefits and harm or costs to the various parties involved. It is thus difficult to assess whether the above-mentioned priorities, as identified, are pursued.

While decisions can more easily be made for criteria (a), (b), (d) and (e), criterion (c) "general effect of license on transport service and effect on public interest" presents some difficulty.

Public interest is nowhere defined and can be equated to public necessity and convenience, but the latter criterion also lacks specificity. The term public necessity and convenience gives regulatory bodies essentially unfettered discretion in substantive matters. In Union Gas v. Sydenham 1957 (SCR'85), the Supreme Court of Canada held that the test of public necessity and convenience was purely subjective. To quote Rand, J.:

> "...It is not an objective existence to be ascertained; the determination is the formulation of an opinion in this use, the opinion of the Board and the Board only."

In a much quoted 1935 decision, Masten, J.A. wrote:

> "the distinguishing feature of an administrative tribunal is that it possesses a complete, absolute and unfettered discretion, and is guided by its own ideas of policy and expendiency. Hence, acting within its proper province and observing any procedural formalities described, it

> cannot err in substantive matters because there is no standard to judge or correct it by."

Public necessity and convenience is a subjective provision (and in consequence one that defies meaningful definition) allowing regulatory boards unfettered discretion.

The public interest may be identified in terms of:

(a) a question of existing service levels vs projected service levels taken from the shippers' viewpoint;

(b) a uniqueness to the proposed service; and

(c) a change in the structure which, although, in the short term, yields benefits to shippers and consumers, over the medium and long term these groups would be the losers with the industry securing greater profits.

Some of the main categories which determine the type of license issued are shown in Table 3. The Board classifies licenses into general and restricted freight licenses; but a carrier may hold several different types of licenses.

If a written request for a public hearing is received by the Board within 10 days following the published notice in two consecutive issues of the Royal Gazette by an applicant for a license, then the Board must hold a hearing. The hearings are formal in nature, and the proceedings that ensue normally follow an adversary pattern. All hearings are open to the public and none are held in chambers.

Since the question of rates is not the main concern, the major issue raised is the quality of service. Carriers who currently hold authority on a specified route oppose very strenuously the introduction of a potential competitor; at the same time asserting that the requested service is being adequately provided. On the other hand, the applicant will likely present witnesses who by their statements, would indicate that there is need for the service as requested in the application.

The nature of the proceedings before the Board together with the rise in the number of objections have increased the direct cost of hearings to both parties. Although the Board may accept written evidence in support of an application, minimal weight is given to it; due to the lack of opportunity to investigate such factors as how often the service is used, the volumes involved, and quality of the service available (competition). Nevertheless, if written evidence is to be submitted, a statutory declaration is preferred.

Notwithstanding, the Board discourages this format and encourages the appearance of witnesses. The result has been that the number of witnesses being provided by both applicants and objectors has risen sharply over the last few years. Furthermore, although not mandatory, most applicants and objectors are today represented by legal counsel at a

Table 3

MAIN CATEGORIES - TYPES OF LICENSES ISSUED

Class

(1) General Trucking

(2) Restricted Trucking (including contract and speciality)

Services

(1) Local (within the boundaries mentioned and 25 mile radius)

(2) Route (Radius 5 miles, area other than local)

Frequency

(1) Regular (in accordance with fixed time interval set by Board)

(2) Irregular (hours, days, weeks, intervals not fixed)

Freight Specialty Services

(a) Furniture

(b) Haul-a-way

(c) Armoured

(d) Milk and Cream

(e) Controlled Temperature

(f) Tank Truck

(g) Lowbed

(h) Others (Specially equipped)

Source: Motor Carrier Act

hearing. Additional comments regarding costs will be made in a later section dealing with the impact of regulation.

Table 4 gives a statistical breakdown of decisions made by the P.U.B. regarding freight carriers over the period 1975 to 1979. Some of the findings are:

(1) there has been little change in the total number of new and amendment applications, intraprovincial and extraprovincial, between the years 1975 to 1979, with totals of 249 and 243 for the years 1975 and 1979, respectively;

(2) the number of transfer applications, especially at the intraprovincial level, is increasing;

(3) the ratio of applications dismissed or turned down to the total number of applications is very low with an average of 10.7% over the period 1975-1979, and having a range of 7.4% (1978) to 18.2% (1976). At the same time the number of licenses suspended is very small, in conjunction with a sharp decline in the number of licenses cancelled. For the latter aspect, there has been a drop in the number of intraprovincial licenses cancelled from a total of 29 in 1975 to 8 in 1979, while for extraprovincial licenses, the decline has been much greater, from 51 (1975) to 19 (1979);

(4) the number of licenses in force has not changed significantly for intraprovincial carriers; but for extraprovincial the number has grown from 601 in 1975 to 680 in 1979, or a 13% increase;

(5) with regard to new licenses issued at the intraprovincial level, there has been only a marginal increase, but at the extraprovincial level, an increase of approximately 50% has occurred.

3.5 Rate Regulation

There is no question that the method by which rates are established is very important to both the shipping public and to the carriers who provide the transportation services. It is well recognized that the rates charged for transport services are ultimately included in the prices of goods (either at the final goods consumption or at the intermediate level) and can affect the economic viability of industries, and, in turn, the employment opportunities in various communities.

In Canada, the truck tariff bureau is the main instrument in the establishment of motor-carrier transport prices. There are seven (7) major Canadian truck tariff bureaus with each having different legal and regulatory structures. The province of Nova Scotia does not have an independent tariff bureau but belongs to the Atlantic Provinces Motor Carrier Tariff Bureau, which is located in St. John, New Brunswick. This is the newest bureau, being in operation only six years. The bureau is (a) member-owned

Table 4

DECISIONS TAKEN BY THE COMMISSION
RE PERMITS, 1975-1979
(freight)

No. of New Applications	1975	1976	1977	1978	1979
Motor Carrier[a]	48	51	26	44	57
Extraprovincial[b]	66	52	53	59	68
No. of Amendment Applications					
Motor Carrier	68	56	69	64	50
Extraprovincial	67	77	86	76	68
No. of Transfer Applications					
Motor Carrier	12	13	22	24	29
Extraprovincial	23	16	21	38	30
No. of Applications Dismissed					
Motor Carrier	10	25	16	5	11
Extraprovincial	9	18	9	13	13
No. of Licenses Suspended					
Motor Carrier	6	11	7	12	5
Extraprovincial	15	15	19	20	9
No. of Licenses Cancelled					
Motor Carrier	29	44	31	21	8
Extraprovincial	51	40	34	22	19
No. of Licenses in Force					
Motor Carrier	477	443	455	462	479
Extraprovincial	601	618	632	657	680
No. of Authorized Vehicles					
Motor Carrier	2378	2446	2559	2723	2873
Extraprovincial	3479	3636	3825	4087	4352
Temporary Authority Certificates					
Motor Carrier	23	41	48	25	45
Extraprovincial	49	54	50	47	50
No. of New Licenses Issued					
Motor Carrier	27	28	28	22	32
Extraprovincial	33	43	40	47	48

[a] Intraprovincial
[b] Out-of-Province

Source: Annual Reports. Motor Carrier Division, P.U.B. and personal correspondence.

Table 5

TARIFF LIST

Atlantic Provinces Motor Carrier Tariff Bureau, Ltd.

Tariff No.	Description	Territory	Participating Carriers
6000	F.A.K., Class and Commodity	Between localities in the provinces of Newfoundland, New Brunswick, Nova Scotia and Prince Edward Island	Day & Ross Ltd. Moffatt Bros Moving & Storage Ltd.
7000	F.A.K., Commodity	Between localities situated in the province of Newfoundland	Day & Ross (Nfld.) Ltd. Moffatt Bros. Moving & Storage Ltd. Newfoundland Transport Ltd. Southern Freight Services Ltd.
8000	F.A.K., Class and Commodity	Between localities in the provinces of Ontario and Newfoundland	Day & Ross Ltd. Speedway Express Ltd.
8020	Exempt Commodity Tariff	Localities in the province of Newfoundland to localities in the U.S.A.	Day & Ross Ltd. Moffatt Bros. Moving & Storage Ltd.
C.P.T.2	Bulk Commodity	Between localities in the province of New Brunswick	M & D Transfer Ltd. Smith Transport - C.P. Transport G. M. Armour & Son Ltd.
4000	F.A.K., Class and Commodity	Between localities in the province of Ontario and the Atlantic Provinces	D'Anjou Transport Inc. Day & Ross Ltd. Jumbo Motor Express Ltd. Midland Transport Ltd. Smith Transport - C.P. Transport Speedway Express Ltd.
5000	F.A.K., Commodity and Named Account Tariff	Between all localities in the provinces of New Brunswick, Nova Scotia and Prince Edward Island	G.M. Armour & Son Ltd. Atlantic Transport Inc. Day & Ross Ltd. Diamonds Transfer Ltd. Drurys Transfer Ltd. Elroy's Transport Ltd. Howards Transfer Ltd. Humphrey's Transfer Ltd. I. & H. Transfer Ltd. M & D Transfer Ltd. Keith MacKinnon Transport McKay's Transport Ltd. Midland Transport Ltd. Moffatt Bros. Moving Storage Ltd. Smith Transport - C.P. Transport Speedway Express Ltd. Thompson's Transfer Co. Ltd.

Québec Tariff Bureau Inc.

Tariff No.	Description	Territory	Participating Carriers
120A	Class and Commodity rates	Between Québec and the Atlantic provinces	Day & Ross D'Anjou Transport Inc. C.P. Transport - Smith Transport Midland Transport Ltd. Speedway Express Ltd. Cabano Transport Transport Letarte

and a non-profit organization, (b) has 14 members and (c) publishes five tariffs which are applicable to the region and between the Atlantic region and Ontario. (See Table 5).

There are many carriers operating in Atlantic Canada who are not members of the tariff bureau. Maritime-Ontario is the principal one with respect to general freight carriers operating between Ontario and Atlantic Canada. Some contract carriers, as well as specialized carriers such as Provost, are also not members. In addition, most small intraprovincial companies are not members. In terms of significance with the other tariff bureaus, the Québec Tariff Bureau has one tariff which is applied between that province and the Atlantic Provinces.

The operations of the Atlantic Provinces Tariff Bureau are not as formal as in other bureaus. If a proposed change is being considered the Bureau will, on an informal basis, advise shippers, C.I.T.L. and the Atlantic Provinces Transportation Commission. While there must be some measure of agreement among the carriers for a general rate increase, for commodity rates these are evaluated on an individual basis. Although rates are filed independently with the Atlantic Bureau, there is no collective rate making as has been practised in other jurisdictions. Furthermore, there is no effective means of enforcement, and a minimum amount of moral suasion is exerted on an individual carrier. Nonetheless, it must be pointed out that the Maritime-Ontario traffic, which is a major segment of the trucking industry, does not belong to the Bureau and competes very vigorously with the regional carriers.

The process for changing rates [24] is relatively simple: a carrier notifies the Bureau in writing of the desired change and the Bureau in turn informs other carriers and determines how many other carriers want to participate, and the new rate is filed. Members have the option to participate or not to participate in the new rate filed.

Regarding the potential for systematic rate violations, the Bureau has not yet experienced too great a difficulty in this area due to the fact that given the transportation subsidies in the Atlantic region, for a carrier to charge less than the published rate would negate the receipt of subsidies.

NOTES

[1] Sec. 1 Motor Carrier Act (M.C.A.)

[2] Sec. 26 M.C.A.

[3] Sec. 3 M.C.A.

[4] The regulations are subject to approval by the Governor in Council 24(c) M.C.A.

[5] Subs. 8(1) M.C.A.

[6] Subs. 3(1) P.U.A. and S. 6 P.U.A.

[7] S. 6 M.C.A.

[8] S. 2 M.C.A.

[9] Paragraph 24(c) (iii) M.C.A.

[10] Subs. 6(2) M.C.A. and S. 25 M.C. Reg.

[11] This condition has contributed to a degree to problems faced by the Board whereby the structure of the industry appears to be changing in terms of market power yet, the Board does not have the opportunity to conduct the necessary assessment.

[12] S. 27, 32 and 33 M.C. Reg.

[13] The application must include information about the proposed service in terms of such factors as routes, speciality of service, frequency, length of routes, schedule, rates, and equipment contract service. No restriction prevails as to the nature and substance of an application. S. 2 M.C. Reg.

[14] Under S. 7 M.C.A. and S. 105, 106 M.C. Reg. the Board has the discretion to issue a temporary authority for which no hearing or procedure is required.

[15] S. 10 M.C.A.

[16] S. 22 M.C.A. and S. 16 M.C. Reg.

[17] S. 26 M.C.A. via S. 97 P.U.A.

[18] S. 13, 24(a), (c), (vi), (vii), (ix), (d), M.C.A.

[19] S. 23, 24 M.C. Reg.

[20] S. 19, 20, 21, 22, 35, 36, 37, 38, 39, 40 M.C. Reg.

[21] Subs. 20(2) M.C.A. and 18(2) M.C. Reg.

[22] Par 24(b) M.C.A. It is to be noted that the Board has the power to fix rates for passenger, baggage and bus parcel express movement.

[23] Armoured cars are an exception to this criterion.

[24] Rates changes can be varied: (a) whole section of a tariff (in this instance a blanket supplement is issued to all members by the Bureau.) (b) limited - a new rate for a specific good or commodity. There are set time limits to this type of tariff (limited freight) with carriers meeting every 6-8 weeks to discuss tariffs of this nature. Following a decision as to whether they (the carriers) want to participate or not, the Bureau files these items as part of the existing tariff.

Chapter 4

ENFORCEMENT OF REGULATIONS

4.1 License

The granting of a license does not give perpetual rights to the holder, nor is he subject to yearly renewal. However, the holder is required each year to secure a certificate of authorization and an identification plate which expires on April 30. [1] The license continues automatically upon the payment of fees and the satisfying of insurance requirements. When a license has been granted, the holder must provide the service for which he is licensed within 60 days, and in case of default the Board may cancel the license without a hearing. [2] The 60 day time frame set for the commencement of the service has not, however, been strictly applied by the Board, and its relevance is to be considered more in terms of the prevention of dormant authority.

4.2 Enforcement

In terms of enforcement, the Board has a significant amount of power as it may amend, suspend or cancel for cause any license after a hearing. [3] The section of the Act which gives the Board this overriding authority does not, however, indicate reasons to justify a suspension of an amendment, and decisions taken in this area have to be exercised judiciously. Regarding cancellation, "for cause" suggests that conditions have changed to the extent that if current circumstances had prevailed at the time of the application for a license, a refusal would have been effected.

In addition, whenever an operation is in violation of the Act, regulations, rules, orders or schedules, this constitutes sufficient cause and the Board has the power, unde S. 19 of the M.C.A., to suspend or cancel a license. Although the Board has the power to suspend or revoke a license if a firm fails to meet the conditions as outlined in the granting of the license, this action has been rarely taken and it has been pointed out that there has only been one instance (this was within the last three years) that such a stiff penalty was imposed.

While most of the attention has been on the entry dimension (application for a license), the abandonment or disconstinuance of a service, partial or total, has to be secured after a hearing is held in which 'show cause' must be made. If successful, an affirmative order by the Board would lead to a cancellation or amendment of the license. [4]

4.3 Rates

While pricing is done by each freight carrier filing schedules of their rates with the Board [5], the P.U.B. has no direct control over freight rates (either exact, minimum or maximum) for motor vehicle freight transportation as it has over passenger, baggage and bus parcel express operators. [6] In effect, for the for-hire trucking industry, the P.U.B. is mainly a filing office to ensure compliance with the filed rates.

4.4 Administration

In Nova Scotia enforcement of the Motor Carrier Act is carried out by nine inspectors under the administration of the Director, [7] P.U.B. This excludes the members of the R.C.M.P. who are also 'inspectors' and have the power to enforce the Act. Seven of the nine inspectors are mobile, and are stationed in several locations in Nova Scotia - Antigonish, New Glasgow, Cape Breton, Truro and Halifax. Two inspectors are permanently stationed in Amherst. The mobile inspectors use their own unmarked cars and may check any freight vehicle regarding the possible contravention of any section of the Motor Carrier Act.

Once an alleged violation of the Act is committed, the inspector submits a written statement of the violation to the Director of Motor Vehicles. A fully detailed report is then completed by the Director which is submitted to the Public Utilities Board. The report is then sent to the Attorney General's department, and if that department decides to prosecute, a lawyer is appointed and the process of taking the case to court is commenced.

While some data is available on the overall total number of inspections conducted, data on the number of violations, convictions and fines paid is not available. However, the cost of prosecuting a violator of the Motor Carrier Act is significant. It has been estimated that the cost of bringing action (which ultimately means the cost to the taxpayer) is three or four times that of the fine imposed on the violator. [8] Consequently, given relatively small fines are imposed, violations of the regulations as outlined by the Act continue.

The Motor Carrier Act has often been described as having "no teeth", with the penalties not being severe enough to act as a deterrent. The inspectors thus become frustrated, having to continually record repeat offences. There are recommendations to the Board to increase the amount of the fines and to expedite payment more speedily. These changes include a range of offences where the penalties consist of fines which, if uncontested, must be paid immediately.

NOTES

[1] S. 6(2) Motor Carrier Act (M.C.A.) and S. 32 and 33 Motor Carrier Regulations (M.C. Reg.)

[2] S. 15(a) M.C.A.

[3] S. 16 M.C.A.

[4] S. 31 M.C.A.

[5] Subs. 20(2) M.C.A. and 18(2) M.C. Reg.

[6] Par. 24(b) M.C.A.

[7] S. 31, 32 M.C.A.

[8] S. 33 M.C.A.

> Any motor carrier who violates or fails to observe any provision of this Act or any order, rule or regulation made under this Act, or who demands, collects or receives any compensation for any service performed by him other than that set out and contained in the schedule of rates, tolls, fares or charges fixed and approved by the Board, or filed with the Board, as the case may be, for services performed by such motor carrier, or who fails to comply with a term or condition of his license shall be guilty of an offence and shall be liable for the first offence to a penalty not exceeding one hundred dollars; for the second offence, to a penalty not exceeding two hundred dollars; and for third or any subsequent offence, to a penalty not exceeding five hundred dollars, and, in default of payment, to imprisonment not exceeding sixty days or to both penalty and imprisonment.

Chapter 5

COMMODITY FLOW ANALYSIS

5.1 Origin/Destination and Commodity Flow Analysis

The 1976 and 1979 Atlantic Provinces Truck Origin - Destination Surveys were the sources of data used to evaluate the flows of various commodity classifications with Nova Scotia origins and/or destinations, as well as the pattern of truck traffic in Nova Scotia.

The objective of the 1976 study was to establish a trucking information base to aid in a proposed highway improvement plan, and to obtain a better understanding of various aspects of the trucking industry in the region. The survey period covered one week and information on the movement of trucks from origin to destination as well as the frequency, volume, and type of commodity entering and leaving the Atlantic Provinces was gathered.

Although this survey gives a fair representation of truck traffic in the region, it suffers from various inadequacies. Some of its weaknesses are (a) its inability to record any seasonal variations in trucking activity, (b) highly aggregated commodity classifications, and (c) only the entry points where traffic entered or left the region are being tabulated. The 1979 survey was used to supplement the 1976 survey. The commodity classification of the 1979 survey was more disaggregated and the external origins and destinations of traffic were recorded.

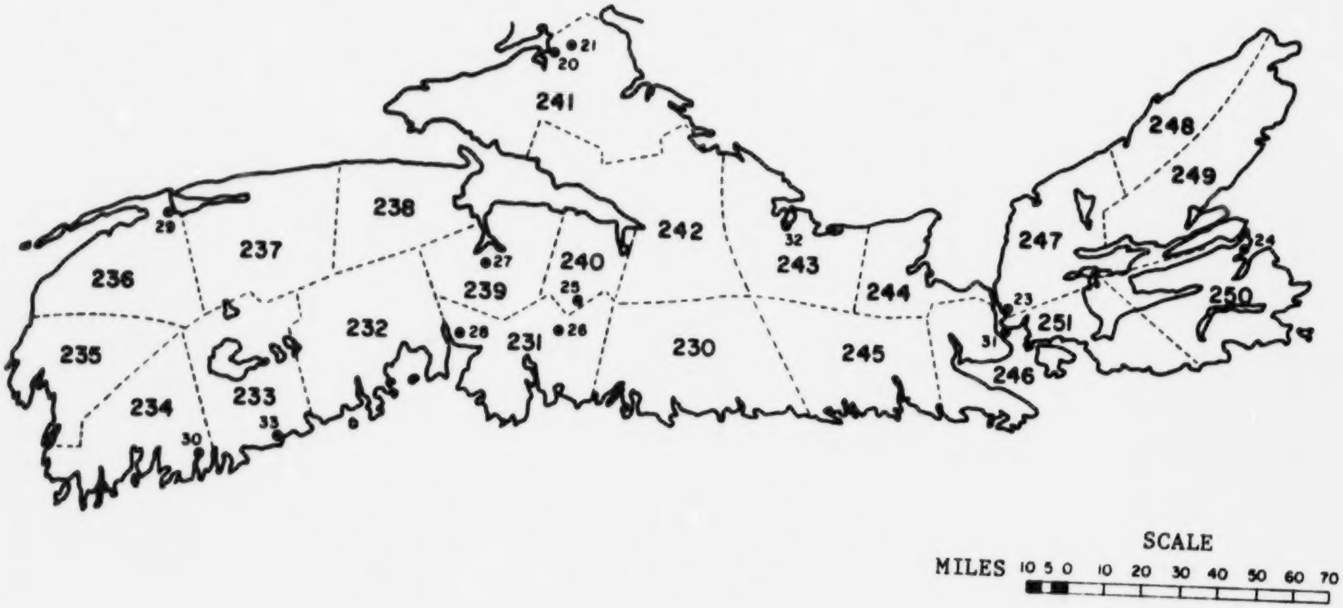
In the 1976 survey, Nova Scotia was broken down into 22 zones. For the purposes of this study these zones were grouped into seven regions by combining those zones in the same geographic area of the province which had similar socio-economic characteristics. Figure 5.1 shows the original zones, and the regions as they were re-grouped. The zone names and the corresponding region names are listed in Table 6. Figure 5.1 also shows the location of the survey stations while Table 7 lists their locations. The annual number of truck trips originating in Nova Scotia were then tabulated on the basis of the newly created regions and shown in Table 8.

The largest percentage of trips originated in Halifax-Dartmouth, with 30.2% of the total, followed by northern Nova Scotia with 18.2%, southwestern Nova Scotia with 15.6%, Cape Breton with 13.4% and the Annapolis Valley-Hants with 11.5% of the total. None of the remaining regions had a share of the total number of trips originating in Nova Scotia exceeding 10%.

For trips with their origin in Nova Scotia, Halifax-Dartmouth was the destination of the largest proportion - 24.2% of the total number followed by southwestern Nova Scotia with 14.9%, Cape Breton accounting for 11.4%, northern Nova Scotia with 10.9% and New Brunswick with 10.8%. These were the only regions or destinations having more than 10% of the total number of truck trips originating in Nova Scotia.

Figure 5.1

NOVA SCOTIA ZONES AND SURVEY STATIONS


21
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232
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231
230
245
31
251
235
246
234
233
33
30
SCALE
MILES 10 5 0 10 20 30 40 50 60 70

Source: Atlantic Provinces Truck Origin-Destination Survey, 1976.

Table 6

NOVA SCOTIA REGIONS AND ZONES

Region	Zone Number	Zone
Halifax-Dartmouth	231	Halifax
Southwestern Nova Scotia	232	Bridgewater
	233	Liverpool
	234	Shelburne
	235	Yarmouth
	236	Digby
Annapolis Valley - Hants	237	Middleton
	238	Kentville
	239	Windsor
Northern Nova Scotia	240	Truro
	241	Amherst
	242	Tatamagouche
Northeastern Nova Scotia	243	New Glascow
	244	Antigonish
Eastern Shore	230	Musquodoboit
	245	Sherbrooke
	246	Guysborough
Cape Breton	247	Inverness
	248	Cheticamp
	249	Ingonish
	250	Sydney
	251	St. Peter's
Nova Scotia	299	Nova Scotia

Source: Atlantic Provinces Truck Origin-Destination Survey, 1976.

The levels of trucking activity recorded at the various survey stations in relation to each of the different commodity groupings, appear to accurately reflect the relative economic strengths of each of the regions where the survey stations are located. Table 9 shows the proportion of each commodity classification which would be recorded annually, based on the survey sample. The Windsor and Enfield survey stations had the highest proportion of truck trips carrying farm products. For forest products, the survey stations at Trenton, Point Tupper, Port Hastings and Liverpool were the major stations. The Sable River, Port Hastings, Hubbards and Digby survey stations were the only stations which recorded a significant amount of sea products carried by truck. The survey stations which recorded the largest volume of minerals were the stations located at Waverley, Enfield, Port Hastings, and Windsor. Trucking activity in manufactured goods was concentrated at the Waverley, Port Hastings and Windsor survey stations. The combined percentages of the Amherst East and Amherst North survey stations would also indicate that a significant amount of manufactured goods transported by truck is recorded at the two Amherst survey stations. Significant volumes of mixed or other goods carried by truck were recorded at the two Amherst survey stations and at the Windsor, Waverley, Hubbards and Enfield survey stations. Based on the level of trucking activity recorded at each survey station in the different commodity classifications, the results of Table 9 seem to confirm that the level of trucking activity reflects the major economic activities of the various regions.

Although several types of vehicles were used in the trucking industry in Nova Scotia, straight trucks and semi-trailers make up an overwhelming proportion of the vehicle types used in the province. Over 98% of the trucks carrying goods falling in each of the commodity classifications, as well as empty vehicles, were either straight trucks or semi-trailers. There were noticeable differences in the vehicle type used, depending on the classification of the commodities being carried. Straight trucks were the major vehicle type used in the transportation of farm products, sea products, and mixed or other goods, with 76.4%, 68.6%, and 54.7%, respectively, of the total number of trips of trucks carrying goods belonging to these three commodity classifications. The percentages of truck trips carrying farm products, sea products, and mixed or other goods which were transported by semi-trailer were 23.1%, 31.1% and 44.1%, respectively. In contrast, semi-trailers were the vehicle type most frequently used in the transportation of forest products, manufactured goods, and minerals. Semi-trailers accounted for 64.5%, 58.7%, and 54.9%, respectively, of the total truck trips carrying forest products, manufactured goods, and minerals, which straight trucks accounted for 34.9%, 40.8%, and 44.3% of the total truck trips for the respective commodity classifications. The relative shares of the different commodity classifications accounted for by the various vehicle types are shown in Table 10.

There were also significant differences in the type of carrier used to transport goods falling in the different commodity classifications. In the 1976 study there were four carrier types. As a general rule, if the goods being hauled belonged to the owner or lessee of the vehicle, it was considered a private carrier. If the goods did not belong to the owner or lessee, it was considered a public carrier. Any vehicle hauling raw forest products such as pulpwood, logs, wood chips, etc., was categorized as a raw forest products carrier (whether it was a public carrier or a private

Table 7

NOVA SCOTIA SURVEY STATION LOCATIONS

Station Number	Name
20	Amherst (Scale - East)
21	Amherst (Scale - West)
23	Port Hastings (Canso Causeway)
24	Sydney (North Sydney - Nfld. Ferry)
25	Enfield (Scale)
26	Waverley (Scale)
27	Windsor
28	Hubbards
29	Digby
30	Sable River
31	Point Tupper (Paper Mill)
32	Trenton (Abercrombie - Scott Paper)
33	Liverpool (Paper Mill)

Source: Atlantic Provinces Truck Origin-Destination Survey, 1976.

Table 8

ANNUAL TRUCK TRIPS FROM NOVA SCOTIA REGIONS, 1976

	Destination				
Origin	Northern Nova Scotia	Northeastern Nova Scotia	Eastern Shore	Row Total	%
Halifax - Dartmouth	69 311	13 048	3 530	302 310	30.2
Southwestern Nova Scotia	10 783	10 189	1 063	155 772	15.6
Annapolis Valley-Hants	12 308	2 789	3 106	114 553	11.5
Northern Nova Scotia	3 453	646	351	181 463	18.2
Northeastern Nova Scotia	367	178	160	74 580	7.5
Eastern Shore	96	104	0	31 893	3.2
Cape Breton	12 248	19 530	14 992	134 029	13.4
Nova Scotia	49	256	54	5 079	0.5
Column Total	108 615	46 740	23 256	999 679	
%	10.9	4.7	2.3		100.0

	Destination				
Origin	Halifax-Dartmouth	Southwestern Nova Scotia	Annapolis Valley-Hants	Row Total	%
Halifax - Dartmouth	52 805	44 735	50 374	302 310	30.2
Southwestern Nova Scotia	37 437	67 536	11 971	155 772	15.6
Annapolis Valley-Hants	42 701	14 354	18 687	114 553	11.5
Northern Nova Scotia	72 904	9 180	5 699	181 463	18.2
Northeastern Nova Scotia	13 425	6 700	1 141	74 580	7.5
Eastern Shore	1 935	1 195	2 084	31 893	3.2
Cape Breton	21 012	4 808	3 421	134 029	13.4
Nova Scotia	53	193	50	5 079	0.5
Column Total	242 272	148 701	93 427	999 679	
%	24.2	14.9	9.3		100.0

Origin	Destination Cape Breton	 Nova Scotia	 New Brunswick	Row Total	%
Halifax - Dartmouth	16 537	241	29 693	302 310	30.2
Southwestern Nova Scotia	4 503	194	5 902	155 772	15.6
Annapolis Valley-Hants	5 205	50	6 048	114 553	11.5
Northern Nova Scotia	15 852	0	48 577	181 463	18.2
Northeastern Nova Scotia	22 057	0	6 461	74 580	7.5
Eastern Shore	21 350	0	264	31 893	3.2
Cape Breton	28 035	384	10 621	134 029	13.4
Nova Scotia	274	0	789	5 079	0.5
Column Total	113 813	869	108 355	999 679	
%	11.4	0.1	10.8		100.0

Origin	Destination Prince Edward Island	 Newfoundland	 Entry Points	Row Total	%
Halifax - Dartmouth	7 578	8 165	6 303	302 310	30.2
Southwestern Nova Scotia	1 163	2 749	2 282	155 772	15.6
Annapolis Valley-Hants	3 679	3 618	2 008	114 553	11.5
Northern Nova Scotia	6 627	13 453	4 721	181 463	18.2
Northeastern Nova Scotia	9 275	13 164	1 652	74 580	7.5
Eastern Shore	399	4 135	331	31 893	3.2
Cape Breton	1 837	14 600	2 541	134 029	13.4
Nova Scotia	0	1 285	2 076	5 079	0.5
Column Total	30 548	61 169	21 914	999 679	
%	3.1	6.1	2.2		100.0

Source: Atlantic Provinces Truck Origin-Destination Survey, 1976.

Table 9

PROPORTION OF COMMODITY TYPE RECORDED PER SURVEY STATION, 1976

	Empty (%)	Farm Products (%)	Forest Products (%)	Sea Products (%)	Minerals (%)	Manufactured Goods (%)	Mixed or Other Goods (%)
Amherst E.	5.8	7.0	0.0	3.0	1.6	9.6	13.3
Amherst N.	9.3	9.6	0.3	4.9	3.6	7.2	6.3
Port Hastings	10.2	8.4	12.2	19.1	14.1	16.6	2.3
Sydney	0.0	0.4	0.0	0.7	0.0	0.3	0.3
Enfield	17.2	17.5	1.9	3.7	26.3	8.5	11.4
Waverley	13.3	3.3	1.5	3.3	32.5	28.6	16.3
Windsor	23.0	40.5	0.9	5.2	11.5	14.7	17.3
Hubbards	13.0	1.9	2.9	17.4	4.9	7.4	13.6
Digby	4.9	6.1	1.4	13.1	4.2	5.7	13.7
Sable River	2.9	5.4	0.4	29.2	1.3	1.3	5.6
Point Tupper	0.2	0.0	29.0	0.3	0.0	0.0	0.0
Trenton	0.1	0.0	39.0	0.0	0.0	0.0	0.0
Liverpool	0.0	0.0	10.4	0.0	0.0	0.0	0.0

Source: Atlantic Provinces Truck Origin-Destination Survey, 1976.

Table 10

CROSS TABULATION OF COMMODITY TYPE BY VEHICLE TYPE, 1976

	Vehicle Type				
Commodity	Straight Truck (%)	Semi-Trailer (%)	Full Trailer (%)	Double Semi (%)	Trailer Train (%)
Empty	46.7	52.6	0.5	0.1	0.0
Farm Products	76.4	23.1	0.2	0.2	0.0
Forest Products	34.9	64.5	0.6	0.0	0.0
Sea Products	68.6	31.1	0.3	0.0	0.0
Mineral	44.3	54.9	0.8	0.0	0.0
Manufactured Goods	40.8	58.7	0.5	0.1	0.0
Mixed or Other	54.7	44.1	1.0	0.1	0.1

Source: Atlantic Provinces Truck Origin-Destination Survey, 1976.

carrier). Any vehicle equipped with a dump body, which includes vehicles hauling gravel, fill, topsoil, aggregate, asphalt, lime, etc., was considered a dump truck. A small number of vehicles were unable to be categorized in any of the above categories.

The relative shares of the different commodity classifications accounted for by the various carrier types are shown in Table 11. As might be expected, raw forest product carriers hauled 96.0% of the goods in the commodity classification forest products. Dump trucks transported 55.3% of the goods in the mineral classification, with public carriers hauling 32.6% and private carriers accounting for 11.9%. For the remaining commodity classifications the only significant carrier types were public and private carriers. For farm products and sea products, private carriers accounted for 62.1% and 58.3%, respectively, of the truck traffic carrying goods falling in these commodity classifications. This compares to figures of 34.3% and 37.6%, respectively, for public carriers hauling farm products and sea products. Public carriers were the major carrier type hauling manufactured goods and mixed or other goods. The breakdown of the transportation of manufactured goods was 64.4% by public carriers and 34.6% by private carriers, while for mixed or other goods public carriers hauled 59.3% while private carriers accounted for 36.7%.

The mix of vehicle types operated by the different types of carriers also varied significantly. The relative shares of the different carrier types accounted for by the various vehicle types are shown in Table 12. Private carriers and dump trucks operated a higher proportion of straight trucks while public carriers and raw forest product carriers had a higher proportion of semi-trailers. For private carriers, the breakdown between straight trucks and semi-trailers was 63.9% and 34.7%, respectively; while for dump trucks the breakdown was 53.1% straight trucks and 46.4% semi-trailers. For public carriers, the breakdown was 34.3% straight trucks and 64.8% semi-trailers; while for raw forest product carriers the breakdown was 34.4% straight trucks and 64.9% semi-trailers.

Table 11

CROSS TABULATION OF COMMODITY TYPE BY CARRIER TYPE, 1976

	Carrier Type				
Commodity	Unknown (%)	Public (%)	Private (%)	Raw Forest Products (%)	Dump Truck (%)
Empty	0.9	53.2	34.1	2.1	9.7
Farm Products	1.6	34.3	62.1	0.4	1.5
Forest Products	0.1	2.6	1.3	96.0	0.1
Sea Products	0.3	37.6	58.3	0.3	3.4
Mineral	0.0	32.6	11.9	0.2	55.3
Manufactured Goods	0.1	64.6	34.6	0.0	0.6
Mixed or Other	0.3	59.3	36.7	0.0	3.6

Source: Atlantic Provinces Truck Origin-Destination Survey, 1976.

Table 12

CROSS TABULATION OF CARRIER TYPE BY VEHICLE TYPE, 1976

Carrier Type	Vehicle Type Straight Truck (%)	Semi Trailer (%)	Full Trailer (%)	Double Semi (%)	Trailer Train (%)	Mobile Home (%)
Unknown	51.8	45.4	2.9	0.0	0.0	0.0
Public	34.3	64.8	0.5	0.1	0.0	0.3
Private	63.9	34.7	0.7	0.1	0.0	0.6
Raw Forest Products	34.4	64.9	0.6	0.1	0.0	0.0
Dump Truck	53.1	46.4	0.4	0.1	0.0	0.0

Source: Calculations derived from Tables 10 and 11.

Chapter 6

THE STRUCTURE AND OPERATING PERFORMANCE OF THE NOVA SCOTIA TRUCKING INDUSTRY

6.1 Introduction

The for-hire motor carrier industry is characterized by a large number of firms that are generally small in size. The Nova Scotia industry appears to be no exception to the general rule. In addition to carriers of widely ranging sizes, there are also several different types of carriers, including common carriers, contract carriers, and others which provide a combination of the latter two services. The considerable diversity in the sizes and types of carriers, the commodities carried, the sizes of shipments, and the length of hauls lead, in effect, to several different sub-industries existing within the motor carrier industry. This diversity within the industry tends to make generalizations, about the industry as a whole, difficult.

The size and structure of the trucking industry in Nova Scotia, as well as its financial state and operating performance, were evaluated using data taken mainly from the annual Statistics Canada publication, Motor Carriers - Freight and Household Goods Movers. The analysis covered the period 1975 to 1978. The data reported in this publication is based on information obtained by surveying all for-hire trucking establishments domiciled in Canada reporting total gross operating revenues exceeding 100 000 dollars during the previous fiscal year. Statistics on private carriers are not included in the annual survey. The trucking establishments which responded to the survey were divided into three categories, according to the amount of total gross operating revenue they earned. The three categories are as follows: Class I carriers - establishments reporting gross annual operating revenues of $2 million or more; Class II carriers - establishments reporting gross annual operating revenues between $500 000 and $1 999 999; and Class III carriers - establishments reporting gross annual operating revenues in the range $100 000 to $499 999. It should be noted that, although other sources of information are used in this chapter, various issues of the Statistics Canada publication mentioned above are the major source since they provide the most detailed and readily available information on the economic and financial aspects of the motor carrier industry in Canada.

In 1978 there were 113 carriers domiciled in Nova Scotia, where six of these were Class I carriers, 19 were Class II carriers, and the remaining 88 were Class III carriers. This compares to the 1975 figure of 91 carriers domiciled in Nova Scotia, when four of these were Class I carriers, 13 were Class II carriers, and the remaining 74 were Class III carriers. The number of carriers domiciled in Nova Scotia and the number of carriers in operation in the province during the four years being studied can be seen in Table 13. The proportion of domiciled carriers to the total number of carriers operating within the province can be calculated from this table. The proportion does not appear to have changed significantly during the period from 1975 to 1978. In 1975, 32% of the total number of carriers operating in Nova Scotia were domiciled within the province. In 1976 the proportion was 30%, while in both 1977 and 1978 the proportion was 33%.

Table 13

NUMBER OF CARRIERS DOMICILED AND OPERATING IN NOVA SCOTIA, 1975-78

Categories	1975	1976	1977	1978
Class I				
Domiciled	4	4*	5	6
In Operation	22	26	31	40
Class II				
Domiciled	13	18	20	19
In Operation	51	56	53	50
Class III				
Domiciled	74	64	78	88
In Operation	121	116	128	144
Total (all classes)				
Domiciled	91	86	103	113
In Operation	194	198	212	234

* Nova Scotia and Newfoundland domiciled Class I carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

6.2 Operating Performance

Two measures frequently used as indicators of the operating performance of the motor carrier industry are the operating ratio and the return on total capital employed (before interest and taxes). The operating ratio measures the relationship between total operating expenses and total operating revenues. It is calculated by dividing operating expenses by operating revenues and multiplying by 100 to convert the result to percentage terms. The operating ratio states the percentage of total operating revenues which are absorbed by total operating expenses. The lower the operating ratio, the more favourable the carrier's operating performance is. The return on total capital employed (before interest and taxes) gives an indication of the magnitude of the return on total capital employed. It is calculated by dividing net operating revenue by total capital employed, and multiplying the result by 100 to convert the return into percentage terms. In this measure, total capital employed is defined as the sum of bank loans, long-term debt, retained earnings and the capital stock.

Table 14 and Table 15 show that, when operating performance is measured by operating ratio and return on total capital employed (before interest and taxes), Nova Scotia domiciled carriers have performed at least as well as, and often better than, carriers domiciled elsewhere in the Atlantic Provinces, and in Canada as a whole, have performed. Nova Scotia domiciled carriers in all three classes have consistently recorded operating ratios below, or at approximately the same level as, the operating ratios recorded by carriers outside the province in the same classes. In addition, the returns on total capital employed (before interest and taxes) obtained by Nova Scotia domiciled carriers have consistently exceeded the returns which carriers domiciled elsewhere in Canada have been able to achieve. When Nova Scotia domiciled carriers are compared to carriers domiciled in the other Atlantic Provinces, two notable features are evident. First, the return on total capital employed (before interest and taxes) achieved by Class III carriers domiciled in Nova Scotia has exceeded the return achieved by Class III carriers domiciled in the other Atlantic Provinces in each of the four years being studied, with the difference ranging from 1.5% to slightly over 4%. The second feature is that, although the returns achieved by Class II carriers domiciled in Nova Scotia and the other Atlantic Provinces were approximately the same in 1975 and 1976, the return recorded by Class II carriers domiciled in the other Atlantic Provinces increased dramatically in 1977 and 1978. During both these years, the returns recorded by Class II carriers domiciled in Nova Scotia were approximately half as large as the returns recorded by Class II carriers domiciled in the other Atlantic Provinces.

A comparison of the operating performance of Class I, Class II, and Class III carriers domiciled in Nova Scotia also revealed several interesting features. Table 16 and Table 17 contain some of the same data which was contained in Table 14 and Table 15, respectively, however it has been reformatted in order to facilitate interclass comparisons. In each of the years being studied Class III carriers had the lowest (most favourable operating ratios), while Class I carriers had the highest operating ratios for every year. Similarly, Class III carriers had the highest return on total capital employed (before interest and taxes) in each of the years surveyed, with carriers in the other two classes roughly the same returns.

Additional measures of the operating performance of the motor carrier industry can be found in the Appendix to Chapter 6. These can be seen in Appendix B, Tables IV to XVII.

6.3 Capital Characteristics

Unlike most other modes of transport, such as the railroads, the for-hire trucking industry has a cost structure which is dominated by variable, rather than fixed costs. Since motor carriers do not need to

Table 14

OPERATING RATIO, ALL CLASSES, 1975-78

Regions and Categories	1975 (%)	1976 (%)	1977 (%)	1978 (%)
Nova Scotia	95.6	95.6	95.2	93.4
Atlantic Canada (excluding N.S.)	95.7	95.2	97.4	94.9
Atlantic Canada	95.7	95.3	96.6	94.4
Canada	95.6	95.9	95.8	95.9
Class I				
Nova Scotia	98.4	96.6*	97.1	93.8
Atlantic Canada (excluding N.S.)	94.5	- **	100.6	96.2
Atlantic Canada	96.0	95.2	99.5	95.4
Canada	95.5	96.2	96.4	96.9
Class II				
Nova Scotia	94.5	95.5	94.1	93.3
Atlantic Canada (excluding N.S.)	96.1	95.9	92.8	92.0
Atlantic Canada	95.6	95.7	93.4	92.6
Canada	96.5	95.7	95.5	95.1
Class III				
Nova Scotia	93.1	94.2	93.1	92.6
Atlantic Canada (excluding N.S.)	97.0	95.5	94.4	94.5
Atlantic Canada	95.3	95.0	93.9	93.8
Canada	94.6	95.0	94.1	92.9

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table 15

RETURN ON TOTAL CAPITAL EMPLOYED (BEFORE INTEREST AND TAXES) ALL CLASSES, 1975-78

Regions and Categories	1975 (%)	1976 (%)	1977 (%)	1978 (%)
Nova Scotia	11.02	12.37	12.64	19.48
Atlantic Canada (excluding N.S.)	11.40	13.95	10.08	17.88
Atlantic Canada	11.25	13.35	11.25	18.78
Canada	9.95	9.78	10.38	10.37
Class I				
Nova Scotia	4.80	11.50*	9.12	19.81
Atlantic Canada (excluding N.S.)	15.86	- **	(2.91)	19.33
Atlantic Canada	11.89	14.78	2.15	19.54
Canada	9.61	8.79	8.96	7.91
Class II				
Nova Scotia	12.82	10.98	12.16	13.42
Atlantic Canada (excluding N.S.)	11.20	12.74	25.50	24.08
Atlantic Canada	11.74	11.94	17.61	18.57
Canada	9.41	11.57	11.68	12.36
Class III				
Nova Scotia	14.85	14.95	18.47	20.82
Atlantic Canada (excluding N.S.)	6.57	10.73	16.08	16.38
Atlantic Canada	10.23	12.97	16.98	17.99
Canada	11.59	11.42	14.25	17.61

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table 16

OPERATING RATIO, NOVA SCOTIA, BY CLASS, 1975-78

	1975 (%)	1976 (%)	1977 (%)	1978 (%)
All Classes	95.6	95.6	95.2	93.4
Class I	98.4	96.6*	97.1	93.8
Class II	94.5	95.5	94.1	93.3
Class III	93.1	94.2	93.1	92.6

Table 17

RETURN ON TOTAL CAPITAL EMPLOYED (BEFORE INTEREST AND TAXES), NOVA SCOTIA, BY CLASS, 1975-78

	1975 (%)	1976 (%)	1977 (%)	1978 (%)
All Classes	11.02	12.37	12.64	17.88
Class I	4.89	11.50*	9.12	19.81
Class II	12.82	10.98	12.16	13.42
Class III	14.85	14.95	18.47	20.82

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

invest in highways, variable costs will make up a large percentage of the motor carrier's total costs. The route used by the motor carrier industry consists of streets and highways which are provided by the government. Thus, the motor carrier avoids having to make this type of large initial investment. The major fixed costs in the for-hire trucking industry are made up of the investment in, and the operation of, terminals. Even so, these fixed costs will usually be a small proportion of total costs. Since no large expenditures on fixed, non-revenue assets are necessary to begin operating a trucking firm, the initial outlay will be relatively small. Therefore, when compared to many other modes of transport, the debt to equity ratio will be much lower. Investment in revenue-earning equipment, such as trucks, tractors and trailers, tended to make up the major proportion of initial capital expenditures.

The capital structure of the Nova Scotia trucking industry was analyzed using a number of ratios. The ratios used are as follows: debt, liquidity, current net debt-worth, current liabilities to net worth, total liabilities to net worth, revenue equipment assets to net worth, total fixed assets to net worth, and revenue equipment assets to total fixed assets. The financial position of the Nova Scotia trucking industry was compared to the positions of carriers domiciled in the other Atlantic Provinces, as well as with the Canadian trucking industry as a whole. In addition, a comparison of the financial positions of the three classes of motor carriers within the province of Nova Scotia was carried out.

The net debt-worth ratio is a widely used measure which shows if creditors have invested more funds in the firm than the owners. This ratio may also be used to establish a firm's credit rating. The net debt-worth ratio is calculated by dividing net indebtedness by total worth, where net indebtedness is equal to total debts minus current assets, and total worth is equal to total liabilities. For the motor carrier industry, a ratio which exceeds 1.5 indicates a precarious financial position.

When compared to establishments domiciled in the other Atlantic Provinces and the Canadian industry as a whole, Nova Scotia domiciled carriers in all three classes had lower net debt-worth ratios, and thus were in more favourable financial positions, based on the net debt-worth ratio. When all three classes are combined, the position of the Nova Scotia domiciled carriers is clearly superior to that of carriers in the other Atlantic Provinces and in Canada as a whole. Table 18 contains the net debt-worth ratio for Nova Scotia domiciled carriers.

The debt ratio is used to measure the proportion of total assets which is financed by debt. It is calculated by dividing total liabilities by total assets. As can be seen from Table 19, the debt ratios for Nova Scotia establishments were lower than, or approximately the same as, the ratios for establishments elsewhere in the Atlantic Provinces and in the rest of Canada.

The liquidity ratio is a measure of a firm's ability to pay short-term debts immediately. It is defined as the ratio of total current assets minus inventories and prepaid expenses to current liabilities. A liquidity ratio of 1 would indicate that a firm has a sufficient amount of liquid assets to meet any immediate short-term debts. Establishments domiciled in

Table 18

NET DEBT-WORTH RATIO, ALL CLASSES I-III, 1975-78

Regions and Categories	1975	1976	1977	1978
Nova Scotia	0.59	0.55	0.48	0.69
Atlantic Canada (excluding N.S.)	0.89	1.10	2.02	2.05
Atlantic Canada	0.82	0.86	1.13	1.29
Canada	1.12	1.21	1.06	1.15
Class I				
Nova Scotia	0.07	0.17*	0.40	0.49
Atlantic Canada (excluding N.S.)	1.62	- **	5.16	13.85
Atlantic Canada	0.82	0.79	1.91	2.15
Canada	1.19	1.35	1.11	1.18
Class II				
Nova Scotia	0.77	0.78	0.27	0.59
Atlantic Canada (excluding N.S.)	0.72	0.61	0.77	0.54
Atlantic Canada	0.73	0.68	0.46	0.57
Canada	1.03	0.94	0.79	0.88
Class III				
Nova Scotia	0.64	0.73	0.93	1.22
Atlantic Canada (excluding N.S.)	1.13	1.55	1.38	1.73
Atlantic Canada	0.89	1.16	1.19	1.53
Canada	0.98	1.06	1.20	1.34

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table 19

DEBT RATIO, ALL CLASSES I-III, 1975-78

Regions and Categories	1975	1976	1977	1978
Nova Scotia	0.61	0.63	0.60	0.64
Atlantic Canada (excluding N.S.)	0.72	0.72	0.82	0.82
Atlantic Canada	0.68	0.69	0.73	0.75
Canada	0.69	0.70	0.69	0.70
Class I				
Nova Scotia	0.56	0.57*	0.62	0.65
Atlantic Canada (excluding N.S.)	0.79	- **	0.92	0.97
Atlantic Canada	0.72	0.70	0.83	0.85
Canada	0.70	0.72	0.69	0.71
Class II				
Nova Scotia	0.68	0.69	0.54	0.60
Atlantic Canada (excluding N.S.)	0.63	0.62	0.66	0.61
Atlantic Canada	0.65	0.65	0.60	0.61
Canada	0.70	0.68	0.66	0.68
Class III				
Nova Scotia	0.60	0.61	0.65	0.69
Atlantic Canada (excluding N.S.)	0.72	0.75	0.73	0.76
Atlantic Canada	0.67	0.70	0.70	0.74
Canada	0.67	0.68	0.69	0.71

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table 20

LIQUIDITY RATIO, ALL CLASSES I-III, 1975-78

Regions and Categories	1975	1976	1977	1978
Nova Scotia	1.00	0.92	1.00	0.88
Atlantic Canada (excluding N.S.)	0.79	0.80	0.66	0.71
Atlantic Canada	0.86	0.84	0.75	0.76
Canada	0.81	0.78	0.82	0.82
Class I				
Nova Scotia	1.43	1.18*	1.15	1.05
Atlantic Canada (excluding N.S.)	0.89	- **	0.62	0.73
Atlantic Canada	1.03	0.95	0.72	0.81
Canada	0.85	0.80	0.85	0.87
Class II				
Nova Scotia	0.93	0.95	1.21	0.88
Atlantic Canada (excluding N.S.)	0.73	0.85	0.81	0.81
Atlantic Canada	0.80	0.90	0.99	0.84
Canada	0.76	0.77	0.83	0.81
Class III				
Nova Scotia	0.76	0.67	0.64	0.65
Atlantic Canada (excluding N.S.)	0.73	0.68	0.54	0.61
Atlantic Canada	0.74	0.67	0.57	0.62
Canada	0.75	0.72	0.70	0.70

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Nova Scotia in all three classes had higher liquidity ratios than did establishments domiciled in the other Atlantic Provinces in the same class. Table 20 also shows both Class I and Class II carriers in Nova Scotia had higher liquidity ratios than carriers in the same classes in the rest of Canada, however the liquidity ratio for Class III carriers in Nova Scotia was slightly lower than the Canadian liquidity ratio for Class III carriers.

The current ratio is another measure of a firm's short-term solvency. It should be noted that for the motor carrier industry the current ratio will be of approximately the same size as the liquidity ratio. This is because the trucking industry will have a very low level of inventories, since it provides a service instead of a tangible product. A ratio of 1 indicates that the firm should be able to meet any short-term requests for payment of debt. Both Class I and Class II carriers domiciled in Nova Scotia had current ratios greater than or equal to 1 in each of the years being analyzed. Carriers in the same classes in the remaining Atlantic Provinces and in Canada as a whole had current ratios of less than 1 in each of the years being studied. The current ratios for Class III carriers were approximately the same size, with the carriers in Canada as a whole having slightly higher ratios, followed closely by Nova Scotia carriers, and finally by Class III carriers domiciled in the Atlantic Provinces other than Nova Scotia. The current ratio is given in Table 21.

Several other ratios were also used to analyze the structure of the Nova Scotia trucking industry. These ratios include the following: current liabilities to net worth, total liabilities to net worth, revenue equipment assets to net worth and total fixed assets to net worth. These ratios are given in Appendix B, Tables XVIII to XXI for Nova Scotia, the Atlantic Provinces excluding Nova Scotia, the Atlantic Provinces including Nova Scotia and Canada.

When the three classes of carriers domiciled in Nova Scotia are compared, one noticeable trend emerges. The net debt-worth ratio was lowest for Class I carriers and highest for Class III carriers. Class I carriers also had the highest liquidity ratio, exceeding 1 during each year. Class III carriers had the lowest liquidity ratios during each year. The current ratio followed much the same pattern as did the liquidity ratio. Class I carriers had the highest ratios, exceeding 1.21 during each year, Class II carriers had a ratio greater than, or equal to 1 during each year, while the ratio for Class III carriers was less than, or equal to, 0.90 during each year. It appears that the debt ratios for the three classes show no interclass relationships, however it should be noted that the ratio for both Class I and Class III carriers has increased during each of the years being studied. These ratios, with the data formatted to facilitate interclass comparisons, can be seen in Table 22. The remaining ratios, for all the classes in Nova Scotia can be examined in Appendix B, Tables XXII to XXV.

Two other tables were developed to further assess the profitability of the trucking industry in Nova Scotia. Table 23 gives the operating ratio by type of carrier for Nova Scotia domiciled carriers in 1978. Substantial duplication may exist since many establishments operate several types of carriers but the ratios which have been calculated can still be used to compare the relative profitability of the various types of carriers. In general, contract carriers and forest products, dump and bulk carriers have

Table 21

CURRENT RATIO, ALL CLASSES I-III, 1975-78

Regions and Categories	1975	1976	1977	1978
Nova Scotia	1.13	1.03	1.16	1.00
Atlantic Canada (excluding N.S.)	0.88	0.92	0.75	0.80
Atlantic Canada	0.96	0.96	0.86	0.87
Canada	0.92	0.89	0.93	0.92
Class I				
Nova Scotia	1.56	1.38*	1.36	1.22
Atlantic Canada (excluding N.S.)	0.98	- **	0.71	0.82
Atlantic Canada	1.13	1.13	0.83	0.92
Canada	0.96	0.91	0.96	0.96
Class II				
Nova Scotia	1.02	1.04	1.42	1.00
Atlantic Canada (excluding N.S.)	0.85	0.95	0.91	0.93
Atlantic Canada	0.91	0.99	1.14	0.96
Canada	0.88	0.89	1.95	0.93
Class III				
Nova Scotia	0.90	0.73	0.71	0.71
Atlantic Canada (excluding N.S.)	0.81	0.75	0.60	0.69
Atlantic Canada	0.84	0.74	0.63	0.70
Canada	0.85	0.81	0.79	0.78

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table 22

NET DEBT-WORTH, DEBT, LIQUIDITY, CURRENT RATIO, NOVA SCOTIA, 1975-78

Net Debt-Worth	1975	1976	1977	1978
All Classes	0.59	0.55	0.48	0.69
Class I	0.07	0.17*	0.40	0.49
Class II	0.77	0.78	0.27	0.59
Class III	0.64	0.73	0.93	1.22

Debt Ratio	1975	1976	1977	1978
All Classes	0.61	0.63	0.60	0.64
Class I	0.56	0.57*	0.62	0.65
Class II	0.68	0.69	0.54	0.60
Class III	0.60	0.61	0.65	0.69

Liquidity Ratio	1975	1976	1977	1978
All Classes	1.00	0.92	1.00	0.82
Class I	1.43	1.18*	1.15	1.05
Class II	0.93	0.95	1.21	0.88
Class III	0.76	0.67	0.64	0.65

Current Ratio	1975	1976	1977	1978
All Classes	1.13	1.03	1.16	1.00
Class I	1.56	1.38*	1.36	1.22
Class II	1.02	1.04	1.42	1.00
Class III	0.90	0.73	0.71	0.71

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Calculations based on earlier tables.

Table 23

OPERATING RATIO BY TYPE OF CARRIER, NOVA SCOTIA, 1978

Type of Transportation	All Classes	Class I	Class II	Class III
Local & Off-Highway	92.3			92.3
Intercity	93.4	93.8	93.3[b]	92.7
Interprovincial	93.2	93.8	91.5[a]	96.8
International	96.5	96.5[a]	96.2[e]	96.9
Common	95.0	95.3[a]	94.5	93.6
Contract	91.9	92.9[a]	90.3	91.4
General Freight	95.2	95.8	92.8[c]	95.9
Forest Products, Dump & Bulk	91.5		92.4[c]	90.8
Other	91.5	87.3[d]	95.2[c]	91.2

See footnotes at end of Table 24

Table 24

RETURN ON TOTAL CAPITAL EMPLOYED (BEFORE INTEREST AND TAXES) BY TYPE OF CARRIER, NOVA SCOTIA, 1978

Type of Transportation	All Classes	Class I	Class II	Class III
Local & Off-Highway	16.6			24.8
Intercity	18.0	19.8	13.4[b]	20.1
Interprovincial	26.7	19.8	19.6[a]	59.8
International	29.5	14.8[a]	8.2[b]	41.3
Common	28.9	20.5	11.5	19.6
Contract	24.1	24.1	18.0	22.1
General Freight	16.5	15.1	18.1[c]	12.6
Forest Products, Dump & Bulk	15.1		15.8[c]	24.5
Other	30.8	29.7[d]	11.5[c]	25.6

[a] New Brunswick domiciled carriers were grouped with Nova Scotia domiciled carriers to meet confidentiality requirements.

[b] Local and off-highway carriers domiciled in Nova Scotia were grouped with intercity carriers to meet confidentiality requirements.

[c] Newfoundland and Prince Edward Island domiciled carriers were grouped with Nova Scotia domiciled carriers to meet confidentiality requirements.

[d] All carriers other than general freight carriers.

[e] Prince Edward Island domiciled carriers were grouped with Nova Scotia domiciled carriers to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues; Correspondence with the CTC.

the lowest operating ratios. Common carriers, international carriers and general freight carriers have the highest operating ratios. However, certain types of carriers are more capital intensive than others so the operating ratio may not be a true measure of the profitability of these carrier types. Table 24 contains the return on total capital employed (before interest and taxes) for carriers domiciled in Nova Scotia in 1978. It can be seen from this table that some of the types of carriers with relatively low operating ratios also had relatively low returns on total capital employed (before interest and taxes), while the reverse held true for some other types of carriers.

Chapter 7

A REVIEW OF THE IMPACT OF REGULATION

Over the last few years the subject of trucking regulation has become one of the most controversial regulatory issues in Canada and the United States. In 1980, after a prolonged debate passage of legislation, the U.S. Congress liberalized entry into trucking and allowed firms greater freedom to set rates in the for-hire trucking industry. A number of studies and reviews by both the provincial and federal governments in Canada have recently been undertaken with a view to assessing their approaches on regulation in this industry.

Much of the research on regulation has been directed to answer the question of whether economic regulation in the for-hire trucking industry has led to rates above the level that would prevail in the absence of regulation. [1] Although the direct cost for the provision of a regulatory mechanism falls on the general public, producers of for-hire trucking services must face costs in relation to entry (seeking and/or forestalling) and also with regard to rate regulation.

Economic theory suggests that regulatory measures will likely bring about a curtailment of supply and the latter action will lead to (1) a transfer of surpluses from consumers to producers; (2) the creation of dead-weight losses arising from inefficient production levels; and (3) the partially protected nature of the industry would cause the "X" inefficiency factor to be incorporated in the cost system of carriers. [2]

It is recognized that significant differences in economic regulation is exerted by the different provinces in Canada. All the provinces have the authority to regulate both inter and intraprovincial for-hire highway carriers. From the outset the distinction between de jure and de facto regulation must be made. A good example of this dimension is the province of Alberta, normally taken as a non-regulating province, which has the power to control entry but for extraprovincial carriage does not exercise this power.

The following Table 25 shows the provinces in terms of de facto regulation of entry and rates for intraprovincial carriage.

Although entry is controlled by all provinces, only two provinces, Newfoundland and Québec, exert control over extraprovincial rate levels. Notwithstanding the latter, some extraprovincial movements in their jurisdiction are still exempt from rate regulation.

From the outset it is to be noted that there is difficulty in determining how precisely the degree of entry control is imposed by the P.U.B. of Nova Scotia.

Table 25

REGULATION OF INTRAPROVINCIAL FOR-HIRE HIGHWAY TRUCKING

Province	Entry Control	Rate Filing	Rate Regulation
Prince Edward Island	Yes	Yes	No
Newfoundland	Yes	Yes	Yes
Nova Scotia	Yes	Yes	No
New Brunswick	Yes	Yes	No
Québec	Yes	Yes	Yes
Ontario	Yes	Yes	No
Manitoba	Yes	Yes	Yes
Saskatchewan	Yes	Yes	Yes
Alberta	No	No	No
British Columbia	Yes	Yes	Yes

Table 26

REGULATION OF EXTRAPROVINCIAL FOR-HIRE HIGHWAY TRUCKING

Province	Entry Control	Rate Filing	Rate Regulation
Prince Edward Island	Yes	Yes	No
Newfoundland	Yes	Yes	Yes
Nova Scotia	Yes	Yes	No
New Brunswick	Yes	Yes	No
Québec	Yes	Yes	Yes
Ontario	Yes	No	No
Manitoba	Yes	No	No
Saskatchewan	Yes	No	No
Alberta	Yes	No	No
British Columbia	Yes	No	No

The available data [3] show

(a) the number of operating authorities in each class on a yearly basis; and

(b) number of applications and how they were handled. Many of these were either an amendment or transfer.

The evidence for the period 1975-1979 can be summarized as follows:

(a) Number of new applications - only a marginal increase at the intraprovincial level, while for extraprovincial there is no significant change;

(b) No. of Amendment Applications

intraprovincial - marginal decline percentage-wise
extraprovincial - no change;

(c) Transfer of applications

intraprovincial - a doubling of the number
extraprovincial - no significant change;

(d) No. of licenses in force

intraprovincial - there are approximately the same number of licenses as in force in 1979 as in 1975.

extraprovincial - there has been a marked increase in the number of licenses (601 to 680) in force; and

(e) New licences issued

for this category the extraprovincial sector has outpaced the intraprovincial.

7.1 Why Regulation?

One of the primary arguments put forward to support regulation of the for-hire trucking industry is that without relatively strict entry controls, the industry would have persistent excess capacity due to too much competition.

This condition would lead to rate levels below those requisite to secure a normal rate of return on capital stock.

Some of the other arguments put forward are:

(a) to ensure that small communities have an adequate service;

(b) to promote safety; and

(c) the restrictions on entry does not lead to increases in the overall level of highway carrier rates. This arises from cross-subsidization, with rates on some routes and goods higher than they would be under a deregulated system, while rates to small communities are lower than they would be under a deregulated system.

Two of the groups favouring entry regulations are existing license carriers and organized labour.

Restriction of entry is desirous by carriers given that the value of their operating authority would decline if entry were made easier. Paradoxically, organized labour may also favour regulation. For example, in Ontario where over 60% of the industry is unionized (the Teamsters accounting for the major percentage) membership is predominantly in large firms. An increase in the number of small carriers could have the potential to adversely affect the union's representation in the industry.

Another aspect is that the level of the real wages in the unionized sector of the industry would fall under deregulation. Furthermore, if there is economic rent arising from regulation, a strong labour union can better increase its money wage than in the absence of a producer surplus. Support for this condition (the appropriation of the monopoly profits by the Union) has been indicated in a study by Annable on the U.S. situation. [4]

7.2 Deregulation

The major arguments for deregulation are (a) regulation of entry leads to rates in excess of those which would prevail in the absence of regulation (b) the industry over the medium or long term will not have destructive competition but rather reflect one of the major advantages of truck transportation, namely flexibility.

The groups normally favouring deregulation are shippers and the non-licensed sector of the trucking industry. It is posited by shippers that monopoly profits arise from entry regulation and thus higher shipping costs. Regulation is also contributory to induced inefficiencies e.g., empty back/hauls and the oligopolization of the industry.

There are two hypotheses which have to be evaluated:

(a) whether excessive and destructive competition would prevail in the absence of entry control; and
(b) have the rates been in excess of those which would have been set in the absence of such regulation.

One of the underlying assumptions of the P.U.B. is that without entry controls the industry would degenerate into destructive competition. The latter is taken to refer to the condition where over the long period of time firms in a competitive industry cover only their variable costs. In the long term, investment will decline enough to eliminate the excess capacity, though the short run may be somewhat prolonged due to capital being perfectly mobile.

Kahn identifies the necessary conditions for the existence of destructive competition which "are fixed or sunk costs that loom large as a percentage of total costs" and "long sustained recurrent period of excess capacity." [5] This inelasticity of supply, in the presence of excess capacity, leads to an ailing industry.

To evaluate the question of regulation versus de-regulation it is necessary to examine the underlying production function of the trucking industry.

Studies have indicated that variable costs (labour, fuel and maintenance, etc.) represent 80 - 90% of total costs, of which labour accounts for between 40 - 60% of total costs. [6] Furthermore, the major portion of the industry capital stock, namely trucks, has a relatively short life.

In addition there is the question of whether there are economies of scale in the trucking industry. Most studies have concluded that economies of scale are either small [7] or non-existent, with the view that it is a constant cost industry. [8] A recent work by Koenker [9] points out that there are decreasing production unit costs up to a relatively low level of output, followed by unit costs increasing gradually.

Given these conditions and the divisible aspects of most inputs, excess capacity or under capacity would prevail only in the short run and thus negate the concept of destructive competition in for-hire trucking.

With respect to the back haul problem faced by one carrier in competition with the front haul of another carrier, the solution will be arrived at through joint marginal production costs being distributed in the two markets.

The second major question is whether regulation of entry has led to higher rates than is optimal. A number of studies attempt to analyse this dimension by formulating a pseudo cost function. Provinces are then classified as regulating or non-regulating, and the cost function fitted to the available aggregate data and it is hypothesized that differentials not explained by cost differences are due to regulatory environment.

Some of the results of such attempts are:

(a) Sloss examined the period 1958-1963 and found regulation contributed to an upward shift of .68 cents per ton mile in intraprovincial levels. [10]

(b) McLachlan estimated regulation had increased intraprovincial truck rates 2 1/2¢ per ton mile. [11]

(c) Palmer, after some refinement of the variables, found de jure regulation led to an increase of 1.8¢ per ton mile, while for de facto regulation the upward shift was 2¢ per ton mile. [12]

While there appears to be no doubt that some modicum of upward shift may have prevailed, all these results must be treated with caution, since the data used is highly aggregate and of poor quality. [13] In addition, there are some differences in the classification of provinces as non-regulating, and thus the results are not truly comparable.

If the industry does not generate the conditions leading to a state of destructive competition in the absence of regulation, then the argument in favour of regulation is not justified purely from allocative criteria. With entry restricted in a de facto manner, carriers who have obtained operating authority, given demand and inter-modal competition, would have the power to increase rates above the competitive market level.

Support for this position is sometimes put forward in terms of the 'Taxation by Regulation' argument which states, carriers are protected on profitable routes to facilitate the provision of services on non-profitable routes.

The above system does not hold in the province of Nova Scotia with the P.U.B. substituting for the market in determining how much capacity is needed on a route by the shipping public. However, given the criterion of the P.U.B. that there should be more than one single carrier on a given route, it is likely that intra-modal competition will mitigate against monopoly profits being realized. On the other hand this is not to assert that rates will be set at a competitive level.

With restricted entry, the existing carriers will likely oppose any additional entrant as it will, in effect lower producer rents, and also decrease the producer surplus if rates fell to competitive levels.

For Nova Scotia, insufficient data preludes the accurate testing of the hypothesis that rate level shifts are caused by entry restrictions. Nonetheless, some indirect conclusions can be drawn from certain developments. While there is no evidence to suggest that deregulation would lead to an upward shift for shippers in small or remote communities, sources within the industry point to the significant degree of merger activity which has occurred recently. (See Appendix B, Table XXVI). Larger firms have been able to circumvent the regulations of the M.C.A., which stipulates that for prior transference of a license for a route, approval must be secured from the P.U.B. They have done so by purchasing the control of a company or firm which operates the license.

With certain trucking firms becoming larger, it is contended that the larger firms will monopolize the "main line routes" which are likely the most highly profitable, and leave the less profitable routes to the small firms or operators.

Whether the greater concentration in the structure of certain segments in the industry will ultimately lead to an upward shift in rates is still uncertain. That there is a changing structure is evident, but the P.U.B., by adherence to its criterion that a monopoly not be held on any route, has at least ensured some de jure competition.

Regarding the aspect of safety, it is sometimes posited that deregulation would lead to carriers not maintaining their vehicles properly in the face of falling profits. One author points out that such a claim is without foundation; and the question of safety laws is quite separate from that of economic regulatory controls. [14]

However, one of the top transportation economists in the U.S., D.H. Maister, recently stated that with substantial deregulation increased safety problems will arise. [15] The latter conclusion is due to such factors as financial difficulties, a larger company tending to have better safety programs than an individual owner-operator, and the growth of subcontracting of owner-operators. The above propositions will have an impact upon overall safety performance in the trucking industry as it affects relative profitability, size structure of the industry, the number of independents and whether larger carriers tend to use employees or owner-operators.

7.3 Costs of Regulation

In a recent study conducted for the Economic Council of Canada by Norman C. Bonsor, he pointed out that the size of the for-hire industry in Nova Scotia is small with a total operating revenue of $67.8 million in 1977 for Nova Scotia based Class I, II, and III carriers. Five Class I carriers and 20 Class II carriers accounted for 40% and 27%, respectively, of the total operating revenue. [16]

The costs of applying for an operating authority was estimated to range between $225 to $3 500; of which legal fees accounted for 70%. An executive of one larger carrier estimated that the typical application cost his company $500 to $2 000. The exact amount depends upon the type of license and the degree of opposition. For the sample population the average cost per application for carriers in the sample was $ 1 165. There is some doubt as to whether the latter figure is not too high. The cost involved will be a function of the client, and what is being sought in the application. For a small client the costs will likely be primarily (a) the cost of advertising and (b) legal fees.

Interestingly, the cost of opposing an application for a license ranged between $200 and $700, with an average cost of $310 per application. In the instance where the opposition is to extraprovincial authority, the costs were judged to be slightly higher.

The cost of applying for and opposing license applications as reported by carriers ranged between 1/6th of 1% and 1/2% of annual operating revenue. However, the majority of carriers indicated that the cost was between 1/2 of 1%, and there is little evidence to suggest that carriers of small size spent proportionately more or less on producing regulatory decisions than did large carriers.

Bonsor also found that carriers spent on average 3/4 of 1% of operating revenue on entry seeking and forestalling activity. As indicated earlier the total operating revenue earned by household goods movers included was $67.8 million in 1977 for Class I, II and III carriers. With approximately 15% of the above revenue being earned from exempt commodities movements, the estimate for regulatory costs is $432 000; with lower and upper limits on the estimate being $339 000 and $670 000. Small carriers had a reported operating revenue for 1976 of $11.127 million for 1976. The estimated cost of regulation to such carriers is $71 000, with the lower and upper limits of $56 000 and $112 000. [17]

The potential impact of de-regulation of the for-hire trucking industry in Nova Scotia is difficult to assess.

Some of the potential advantages are:

(a) decrease in highway carrier rates; and

(b) shift from private truck transportation to for-hire trucking

One of the disadvantages from the carriers viewpoint is the loss in asset values for existing licensed carriers.

However, given the changing structure and greater concentration occurring in the major class or classes, the net benefits to the shipping public, over the long run, may not be realized.

The degree to which authority is exercised in Nova Scotia by the Board, falls somewhere between the extensive application of regulatory power and a nominal exercise of power. Public interest is interpreted by the Board as the circumstances of each situation are examined.

It would appear that the Board attempts to balance conflicting objectives of shipper and carrier welfare by not denying to licensees the right to grow, but to hopefully inject sufficient new entrants into the field to maintain some balance in favour of the public interest.

NOTES

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[3] See Table 4, in Chapter 3, decisions taken by Commission 1975-79.

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[13] Statistics Canada, 1973.

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[15] David H. Maister. "Lessened Truck Safety Seen Result of Regulatory Changes". Transport Topics, June 9, 1980, p. 26.

[16] Norman C. Bonsor; M. Boucher; J.J. McRae; D.M. Prescott, R. Lord, and J. Shaw. Studies of Trucking Regulation: Volume II, Working Paper No. 3, Regulation Reference, August 1980, Economic Council of Canada.

[17] N.C. Bonsor. op. cit., p. 53.

Chapter 8

POTENTIAL FOR SUBSTITUTION OF FOR-HIRE TRUCKING AND THE IMPACT OF PRIVATE TRUCKING

This section deals with the potential impact of private trucking and the role of substitute transport services to for-hire trucking. It was indicated ealier that entry control is the primary tool of the Public Utilities Board in the exercise of their power with respect to regulatory goals; but there are a number of agencies and mechanisms which serve to reduce the protectionist nature as pronounced by the Commission. Some of the inter and intra modal alternatives are: (a) illegal transport; (b) pseudo-leasing; (c) private transport; and (d) rail transport.

Prior to a discussion of structural factors, it is worthwhile to restate how rates are determined in Nova Scotia. Rates for for-hire carriers are filed with the Atlantic Provinces Tariff Bureau. Whether a tariff bureau can transform the provincial industry into an effective cartel and generate monopoly profits is however open to question. The generation of monopoly profits is a function of the bureau's ability to enforce its pricing policies; but this is inapplicable in terms of the present system where members are free to set their own rates and may opt out of the bureau. The inability of the tariff bureau to organize an effective trucking cartel has led one author to conclude that a tariff bureau has only a marginal impact in facilitating a group of provincially regulated carriers to secure excess profits. [1]

One of the potential forms of substitution in the trucking industry is the 'illegal' transport. The latter condition prevails when a carrier either does not hold the required permit or exceeds the privileges accorded in his permit. Some of the factors which might lead a trucking firm to participate in 'illegal' activities are (a) the likelihood of arrest and (b) the severity of the punishment for an offence in terms of the level of profits which might be secured. [2]

Although no summary data on 'illegal' activities is available, it was concluded from interviews that the probability of arrest is low, in conjunction with a relaxation of surveillance by inspection stations at night. In addition, the fines imposed are generally low or ridiculous in terms of the illegal action or infraction, or the costs of prosecution. Furthermore, the great degree of complexity in the license or permits granted reduces the effectiveness of the inspection officers in deciding upon the legality of an operation or trip.

It would appear that a similar pattern prevails in Nova Scotia as in Québec in terms of the amount of the fines paid if a carrier is found guilty. In the latter province over the period January 1976 to May 1978, "unlawful" truckers paid 1 104 fines arising from contraventions or notices of contraventions; with 62.5% of these fines equal to or less than $50.00. [3]

In terms of enforcement, the P.U.B. has yet to withdraw or suspend the license of a carrier convicted of 'illegal' trucking. In conclusion, it would appear that the regulatory and prosecuting mechanisms support the profitability of 'illegal' trucking rather than counteract it in terms of costs.

8.1 Pseudo-Leasing

With this method firms lease the services of a truck and driver, rather than the total transport service as a common carrier.

The general practice is to lease the same truck to a given number of shippers which will be used to carry several full loads or make round trip journeys.

Since these firms are not subject to economic regualtion by the P.U.B., their services are likely to cost less than those of the public carriers. One of the advantages of pseudo-leasing is to improve the quality of service through reductions of transhipment, time, interchange, and risks of damage to goods.

In Nova Scotia pseudo-leasing is not legal, however it is probable that some form of legislation may be forthcoming which will both define and control this activity as is currently done in Ontario and Québec. The purpose of any new regulations on leasing must however be expressly stated. It has been suggested that the main effect of such regulation would be to legalize a number of operations which were previously illegal. It should be noted that recently (1977) the Government of Québec issued new regulations on leasing, and it appears that these regulations have the support of many groups. [4]

One inter-modal substitute which shippers can use is private trucking, if the conditions under regulatory control prove too costly. It has been contended that an induced shift in the rate above the competitive level will lead to an increase in private trucking. A number of studies have indicated that private truckers are a direct substitute for commercial trucking. In Canada it was shown by McLachlan that shippers located in regulated provinces make greater use of their own fleet of trucks than those shippers in provinces where the market forces operate freely. [5] Oi and Hunter arrived at a similar conclusion and found that private carriers were direct competitors to public carriers rather than with railways. [6].

However, the decision by a firm to substitute private trucking if it currently utilizes for-hire trucking will not be taken lightly. Some of the factors to be considered if a switch to private trucking is contemplated are: (a) a lower utilization rate and (b) the flow of a firm's goods is likely to be in one direction, often returning empty to the point of origin, given the fact that a private carrier cannot seek out traffic on a commercial basis.

The lack of data on private trucking in Nova Scotia renders it necessary to draw on other studies to prove or disprove the above tenets. In their study, Oi and Hunter found that the average payload weights for all public carriers were higher than the average weight of loads in ton per vehicle mile for the private carriers. [7] Two studies conducted by the Select Committee of the Ontario Legislature give support to the above-mentioned study. The first survey by the Select Committee indicated that the private carrier's average per vehicle load was smaller than the for-hire carrier with mean gross weights of 71 300 and 73 000 pounds, respectively. [8] A second survey conducted in 1976 showed that the percentage distribution of miles travelled empty was 24.4% for private carriers versus 15.84% for for-hire carriers. When light runs (total loaded weight is 25% or less of its possible maximum value) were examined, the results were 31.17% for private carriers and only 3.82% for for-hire carriers. [9]

Regarding back haul occupancy rates between for-hire and private carriers, a study by Miller and Moore found truck utilization to be lower for the private carrier by a minimum of 10% as compared to the for-hire carrier. [10]

Notwithstanding, there is a share of the market which is controlled by private trucking and, as Stressy suggests, the latter does have a comparative advantage in the instances of small shipment/short haul freight movements through keeping terminal expenses at a minimum. [11]

The available data on volume of freight transported by private carriers is not very detailed. In Ontario, it is estimated that private trucking accounts for at least one-third of the trucking activity in that province. [12] This percentage would likely increase if certain proposals put forward over the last year by various shipper groups are enacted upon. The latter have proposed legislative changes to the Ontario Public Commercial Vehicles Act which would permit a firm that moves its own goods to also move that of a related cooperation for compensation, without satisfying the test of public convenience and necessity imposed on common carriers. The for-hire carriers have opposed such developments of incorporate private trucking very strongly, indicating such action could lead to similar conditions which occurred in Saskatchewan and Manitoba. In these provinces, private trucking eroded for-hire truck traffic to such a degree that the profits of common carriers deteriorated. The option of limiting private operations is now being examined.

The for-hire members of Ontario's Trucking Association, also contend that 'illegal' trucking, which is now fairly significant, would likely increase under the guise of private trucking should the scope of intercorporate trucking activities be enlarged. [13] Furthermore, intercorporate haulage is permissible under present laws where one firm has 100% control of another; and can be affected through the wholly owned subsidiary becoming an operating division within the parent firm. This approach would, however, differ from the present conditions in the U.S. where under the Motor Carrier Act of 1980 private intercorporate trucking is permitted. [14]

In Nova Scotia the data on volume of freight transported by producers on their own account is not very adequate. Nonetheless, private trucking is estimated to be 30% of the trucking activity in Nova Scotia.

In summary, the proportions of the freight carriage accounted for by for-hire motor carriers and private motor carriers will be a function of such factors as (a) regulatory environment, (b) quality of the transportation service and (c) costs of using public carriers. It would appear that in Nova Scotia, as in other parts of Canada and the United States, certain major industry groupings such as petroleum, printing, food, furniture and lumber industries make significant use of private trucking.

Where the service requirements for a given industry are for a significant number of short-haul freight movements, it is likely that greater use would be made of private trucking, especially in the case of a small firm.

While for-hire trucking in Nova Scotia has to meet certain requirements and regulations as set forth by the P.U.B., private trucking is excluded for the M.C.A. and is not subject to federal regulatory authority. A contributory factor to the exemption of private trucking is the impossibility in enforcing certain regulations (e.g., rate regulation) upon firms for which such rate is an internal price.

Competition from rail transport to the trucking industry can be assessed from either (a) quality of service - speed, frequency, rate structure or (b) availability to shipper. One disadvantage of rail is its specific location and the recent trend to eliminate non-economic lines. Nonetheless, rail does have a comparative advantage based on its capacity to carry heavy loads over long distances. However, with the railway becoming increasingly restricted to hauling raw materials over long distances, the degree of feasible substitution falls. Despite this, there is one area that the railway constitutes a very effective substitute for the for-hire motor carriers and that is in the carriage of automobiles.

The varied forms on intra-modal and inter-modal substitutes suggest opportunities to circumvent the formal barriers set up in the regulations by the P.U.B., though operating still in the context of the trucking industry. Shippers have an opportunity to utilize alternative modes; though they tend to operate in different sub-markets depending on comparative advantages and conditions.

At the same time the various substitutes offer shippers a certain flexibility which should ensure a move towards a criteria of efficiency comparable to that which would prevail in a competitive system. Substitution is a mechanism by which shippers adjust to the conditions created by regulation. The limits of the actual effectiveness of the regulation depend upon the opportunity to use a 'competitive' alternative to for-hire trucking.

NOTES

[1] M. Boucher. Economic Analysis of Québec Regulations Governing the Trucking Industry, Canadian Transport Commission, 1979.

[2] G.S. Becker. "Crime and Punishment: An Economic Approach", reprinted in The Economic Approach to Human Behaviour, Chicago, The University of Chicago Press, 1976, pp. 39-85.

[3] M. Boucher. op. cit., p. 26.

[4] In Québec a shipper can make use of leasing services having only to prove that the driver of the leased truck is one of his own employees. Common carriers that have leasing firms as subsidiaries may also continue to provide leasing services which are not allowed under the common carrier permits.

M. Boucher. op. cit., p. 28.

[5] The regression analysis showed that the percentage of ton miles affected by private carriers is greater in the regulating provinces as contrasted to the non-regulating. The findings were applicable not only to industries which traditionally are heavy users of private transport e.g. forestry and petroleum, but also to the chemical industry which is purported to be a small user of the private mode if competitive modes are available.

D.L. McLachlan. "Canadian Trucking Regulations". The Logistics and Transportation Review, Volume 8, No. 1, January 1972, pp. 73-75.

[6] W.Y. Oi and A.P. Hunter. Economics of Private Truck Transportation, W.C. Brown Company Publishers, Dubuque, 1965, pp. 98-162.

[7] The following table is taken from the Oi and Hunter study. It compares the average per-vehicle loads of different types of motor carriers:

AVERAGE PER-VEHICLE LOAD (IN TONS)

Carrier	Truck	Haulaway operator and semi-trailer
ICC-regulated	1.94	7.8
Agricultural products or intra-state	2.17	8.99
Private	1.09	6.76
Average	1.20	7.55

Source: W.M. Oi and A.P. Hunter. Economics of Private Truck Transportation, op. cit., p. 109.

[8] "A Public Policy Direction for the Highway Transportation of Goods". Final Report of Select Committee of the Legislature on Highway Transportation of Goods, Queen's Park, Toronto, 1977, pp. III-66 to III-81.

[9] "Ontario Trucking Industry: Empty and Light Mile Survey", reprinted in Final Report of Select Committee of the Legislature on Highway Transportation of Goods, Part VIII, Appendices, Queen's Park, Toronto, 1977, pp. 334-386.

[19] Percentages for empty backhauls in the case of private and regulated motor carriers in the United States, 1969

Type of Trailer	Private Carrier	For-hire Carrier
Flatbed	40.9	35.9
Open	35.7	20.5
General purpose	31.4	19.0
Other	30.5	21.1

Source: T.G. Moore. "Deregulating Surface Freight Transportation", in Promoting Competition in Regulated Markets, op. cit., p. 63.

[11] D. Stressy. "Cost Structure of Private and For-hire Motor Carriage". Transportation Journal, Spring 1976, Volume 15, No. 3, pp. 40-48.

Oi and Hunter. op. cit., pp. 191-226.

[12] Transport Canada. An Interim Report On Freight Transportation in Canada, Ottawa, 1975.

Ontario Ministry of Transportation and Communications. Truck Transportation in the Province of Ontario, 1975.

[13] Sandy Fife. "Truckers want freeze on private carrier growth". Canadian Transportation and Distribution Management, January, 1981, pp. 21-22.

[14] In the U.S., any company owning 100% of any other company may, after the ICC is informed of the name and address of the subsidiary, begin private trucking operations within the corporate family.

A separate wholly owned transportation company to serve corporate families is permitted.

Ibid.

Chapter 9

OBSERVATIONS OF THE ASSISTANCE PROGRAM

Transportation subsidies have been used explicitly as a tool of development in the Maritime Provinces [1] since the passage of the Maritime Freight Rates Act in 1927.

Some of the major justifications for transport subsidies have been identified (a) as increasing returns to scale in the transport industry, and (b) to secure public policy goals such as income redistribution and development. [2] In the latter context one author points out that regional weaknesses were a factor of distance, transportation and transportation rates; which in turn led to involvement by the Federal Government through different subsidy arrangements. [3] The arguments, pro and con, will not be dealt with at any length in this chapter; but rather some observations will be made on effects of subsidies on the Nova Scotia trucking industry.

Subsidies are available for commodities moving westbound from the "select territory" (area of the Atlantic provinces plus the portion of Québec east of Levis and Diamond junction) as identified in Figure 9.1. Although assistance had been available for decades for rail movements throughout the region under the Maritime Freight Rates Act, it was not until 1969 with the passage of the Atlantic Region Freight Assistance Act that the for-hire motor carrier industry became eligible to secure similar assistance for movement of goods out of the region. The subsidy equated a 30% reduction on the Atlantic Region segment of the rate.

No study on the for-hire trucking in Nova Scotia should fail to review, even briefly, the dimension of subsidy payments. The ensuing comments are based on data compiled from previous works and interviews.

Table 27 shows the total sums disbursed under the Maritime Freight Rates Act and the Atlantic Region Freight Assistance Program. Column 3 indicates the sums received by trucking from ARFAA: the difference between columns 2 and 3 being accounted for by disbursements to the rail mode. A further breakdown of column 3, showing the subsidies received by trucking under the various programs, is given in Table 28.

Some of the major commodities on which subsidy payments are effected for goods originating in Nova Scotia -- both westbound and intra movements are shown in Table 29. Certain points should be noted regarding the figures in this table. The ARFAA westbound figures were secured on the basis of a 25% sample of westbound movements, while those under ARFA Intra were derived on the basis of a 5% sample on Intra-select territory movements. Notwithstanding the sample size, the items indicated are the most important measured in terms of billed revenues and subsidies paid for Nova Scotia.

Under the ARFAA westbound program Nova Scotia Select, frozen processed fish and hardboard are the primary products receiving subsidies.

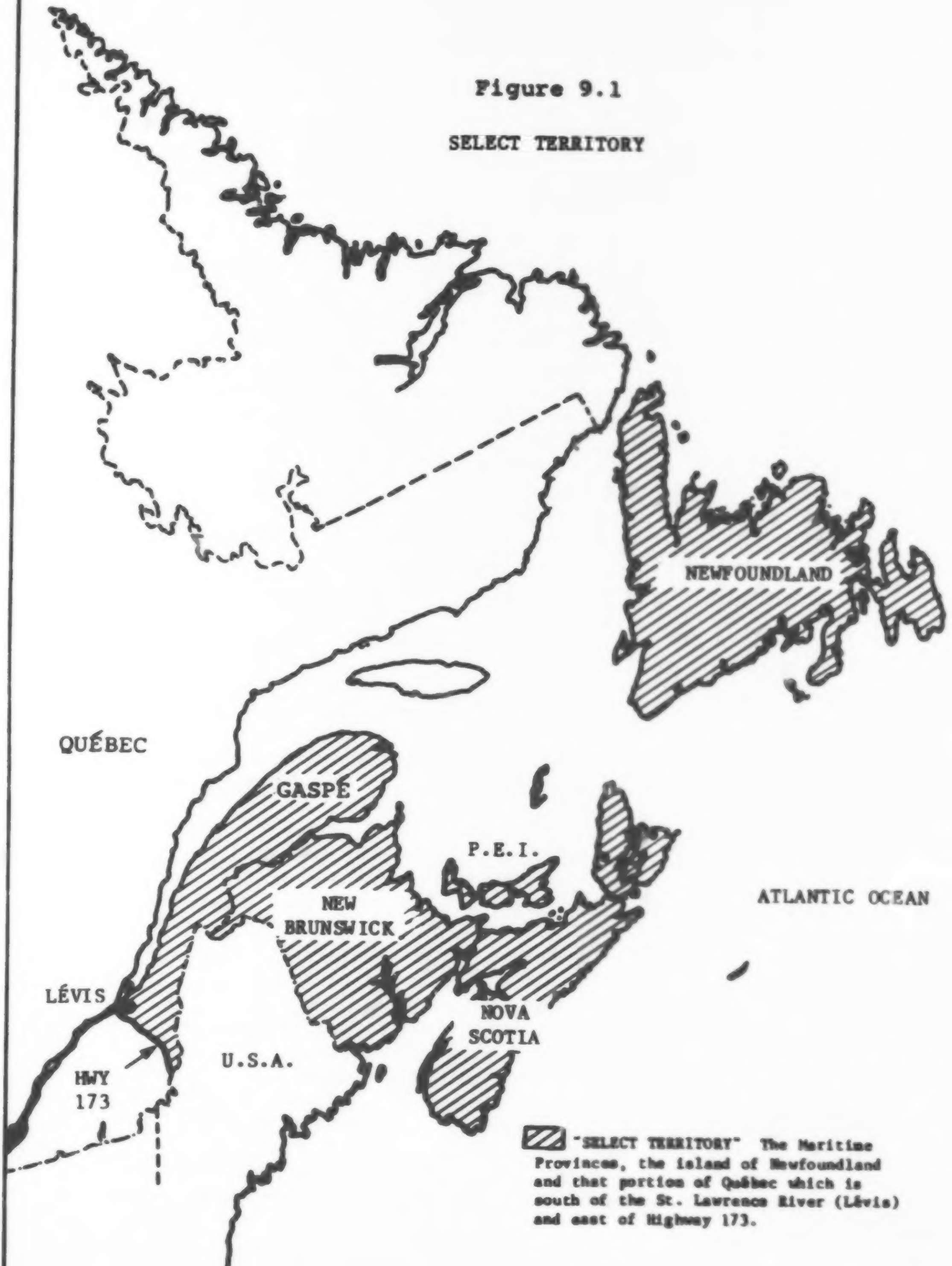
QUÉBEC
NEWFOUNDLAND
GASPÉ
P.E.I.
NEW BRUNSWICK
ATLANTIC OCEAN
LÉVIS
NOVA SCOTIA
HWY 173
U.S.A.

Figure 9.1

SELECT TERRITORY

▨ "SELECT TERRITORY" The Maritime Provinces, the island of Newfoundland and that portion of Québec which is south of the St. Lawrence River (Lévis) and east of Highway 173.

Table 27

MARITIME FREIGHT SUBSIDY DISBURSEMENT RATES ACT AND ATLANTIC REGION FREIGHT ASSISTANCE PROGRAM, 1970-71 TO 1979-80

(fiscal year)

$ million

Year	MFRA (1)	ARFAA (2)	Trucking (3)	Total (4)
70/71	14.0	1.4	1.4	15.4
71/72	13.1	7.0	7.0	20.1
72/73	13.0	11.4	11.4	24.4
73/74	14.0	16.0	16.0	30.0
74/75	15.1	21.5	20.6	36.6
75/76	16.0	23.7	21.9	39.7
76/77	17.1	27.1	25.0	44.2
77/78	16.1	29.9	28.0	46.0
78/79	15.4	41.2	36.3	56.6
79/80	11.7	48.6	37.7	60.3

Selected Year			Intra-select		
1977	Westbound Regular	Westbound Select	Regulated Carriers	Unregulated Carriers	All Carriers
Total Billed Revenues	21 149 290	15 988 475	109 826 876	45 410 940	155 237 816
Total Subsidy Payments	5 155 859	1 555 474	14 986 547	6 471 235	21 457 782

Source: Correspondence with Canadian Transport Commission.

Table 28

SUBSIDY DISBURSEMENTS, ARFAA, TRUCKING
($ millions)

Subsidy	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80
Westbound Regular	1.4	1.6	2.1	2.8	3.8	3.7	4.7	5.0	7.1	7.5
Westbound Select	-	-	-	-	0.7	1.1	1.4	1.5	2.4	2.5
Intra[a]	-	5.4	9.3	13.2	16.1	17.1	18.9	21.5	19.5	0.9
Intra-Select	-	-	-	-	-	-	-	-	6.2	23.1
Intraprovincial	-	-	-	-	-	-	-	-	1.1	3.7
Total	1.4	7.0	11.4	16.0	20.6	21.9	25.0	28.0	36.3	37.7

[a] Decline of Intra due to phase out between September 78/79 to 79/80.

Source: Correspondence with Canadian Transport Commission.

Table 29

PROVINCE OF ORIGIN, MAJOR COMMODITIES, TOTAL BILLED REVENUES AND SUBSIDIES FOR NOVA SCOTIA, 1977

Program	Commodity	Total Billed Revenues ($)	Subsidies ($)
ARFA Westbound[a]			
N.S. - Select	Frozen processed (packaged) fish	-	31 624.03
	Hardboard	-	30 967.99
	Egg Cartons, Cases & related articles	-	10 405.26
	Rubber pneumatic tires & parts	-	9 210.50
	Woven Carpets, mats or rugs	-	7 688.60
N.S. - Regular	Household Goods	-	104 481.41
	Metal Scrap, Wastes, Tailings	-	8 353.29
	Motor Vehicle Body parts	-	4 898.53
	Misc. Manufactured products	-	3 339.32
	Metal Scrap, Waste or Tailing	-	3 130.54
ARFA Intra[b]			
Type 1[c]	Gasoline	105 206.01	15 974.83
	Distillate Fuel Oil	70 354.61	10 633.17
	Beer	45 639.03	6 837.98
	Mixed Foodstuffs	41 404.93	6 236.16
	Bulk Milk	39 526.09	6 052.31
Type 2[d]	Pulpwood Logs	325 118.72	49 026.29
	Sawlogs	118 888.61	17 845.70
	Pulpwood Chips	64 115.07	9 620.45
	Sand	36 262.20	5 435.37
	Rock Salt	33 654.31	-
	Common Salt	-	5 091.41

[a] 25% sample

[b] 5% sample

[c] Intra-regulated

[d] Intra-unregulated

Source: CTC print-out.

It would not be too surprising, however, to find rubber pneumatic tires and parts improving in the rank order by 1979. Under Nova Scotia Regular, the movement of household goods attracted the greatest proportion of subsidies, more than ten times the next metal scrap, wastes and tailings.

On the intraprovincial level for the intra-regulated, (type 1), gasoline and distillate fuel oil account are the top two items on which subsidies are collected; while for intra unregulated (type 2), forestry products, pulpwood logs, sawlogs and pulpwood chips, are well premier recipients.

On a general level, overall freight subsidies, (including ARFAA, fuel tax rebates etc.), which were accounted for by Classes I to III by province of domicile, are shown in Table 30. It can be observed that in 1978, freight carriers domiciled in Nova Scotia were in receipt of a total approximating 49% of that paid to New Brunswick freight carriers. The major proportion of the differences have an equal number of carriers, the subsidies secured by the New Brunswick carriers are three times that secured by Nova Scotia carriers.

In Class II, Nova Scotia has almost 50% more carriers than New Brunswick, yet carriers in the latter province are in receipt of twice the volume of subsidies secured by Nova Scotia. Only in Class III (Nova Scotia has 88 carriers versus 69 for New Brunswick) is the total amount of subsidies paid in Nova Scotia greater than New Brunswick.

Despite certain amendments in the categories eligible for subsidies in 1978, the total subsidy payments to trucks between 1977/78 and 1979/80 ranged from $6.969 million to $8.844 million in 1978/79 and $7.977 million in 1979/80 (see Tables 31-33). It can be seen that for Nova Scotia the freight assistance granted under intra-select and provisional (ARSSPA - ARSTA until September 1978) category accounts for the predominant share of freight assistance on cargo. Subsidies on the westbound regular and select accounted for only 8.3% in 1978/79 and 1979/80 respectively.

What has been the effect of subsidies on the trucking industry? Despite the fact that to answer this complex question a detailed analysis should be conducted, a brief review of some of the major aspects will however be undertaken. The conclusions put forward will be derived by inference rather than by direct analysis. With the for-hire industry eligible for subsidies since 1969, the impact of subsidies has historically been identified in terms of a greater growth rate of the trucking industry and a shift from private to contract trucking.

Looking first at the growth rate of the trucking industry, the number of licenses in force, although not a perfect measure, can be taken as a proxy measure of growth. It must be stressed that this measure must be used with caution since it would also reflect such factors as economic growth and industrial expansion in the province.

By the end of the 1970's there were 1 159 motor carriers and extra-provincial freight licenses in force (temporary permits numbering 95

Table 30

FREIGHT CARRIERS' SUBSIDIES, 1978

Territory	Class I		Class II		Class III		Class I, II & III	
	No.	Subsidies ($)	No.	Subsidies ($)	No.	Subsidies ($)	No.	Subsidies ($)
Canada	272	10 777 682	657	3 867 762	2 660	3 642 535	3 589	18 287 979
Newfoundland	3	262 876	3	153 220	61	537 342	67	9 540 038
Prince Edward Island	0	0	3	339 719	17	240 371	20	580 090
Nova Scotia	6	1 393 806	19	779 891	88	746 822	113	2 920 519
New Brunswick	6	3 977 761	14	1 534 543	69	720 794	89	6 233 098
Québec	60	4 455 132	163	950 563	647	949 354	870	6 355 049
Ontario	106	683 037	195	66 772	687	265 086	988	1 014 895
Manitoba	16	0	16	0	115	29 353	147	29 353
Saskatchewan	3	0	22	250	113	21 874	138	22 124
Alberta	39	5 070	117	7 748	444	60 150	600	72 968
British Columbia	33	0	100	35 056	413	70 789	546	105 845
Yukon & Northwest Territories	0	0	5	0	6	0	11	0

Source: Statistics Canada. Motor Carriers - Freight Survey, 1978.

Table 31

ACTIVITY ATLANTIC REGION FREIGHT ASSISTANCE PROGRAM PAYMENTS BY PROVINCE, TRUCKS, 1977/78

Province	ARFA ($)	ARSA ($)	ARSTA ($)	TOTAL ($)
NFLD.	122 829.33	-	2 263 592.55	2 386 421.88
P.E.I.	65 645.04	27 373.60	725 413.62	818 432.26
N.S.	547 252.66	36 195.98	6 386 480.06	6 969 928.70
N.B.	1 161 951.69	550 074.04	6 908 101.82	8 620 127.55
QC	2 243 637.21	509 907.80	3 123 717.81	5 877 262.82
ONT.	397 837.21	216 832.92	123 184.30	737 855.02
MAN.	243.30	-	-	243.30
SASK.	352.66	-	-	352.86
ALTA	1 351.45	-	87 162.68	88 514.13
B.C.	30.83	-	-	30.83

Source: Correspondence with the Canadian Transport Commission.

Table 32

ACTIVITY ATLANTIC REGION FREIGHT ASSISTANCE PROGRAM PAYMENTS BY PROVINCE, TRUCKS, 1978/79

Province	ARFA ($)	ARSA ($)	ARSTA ($)	ARSSPA Selective ($)	ARSSPA Provisional ($)	TOTAL ($)
NFLD.	145 938.95	-	2 421 888.00	597 216.09	122 923.69	3 287 966.73
N.S.	705 754.57	32 482.23	6 185 765.61	1 555 959.16	364 681.87	8 844 643.44
P.E.I.	84 752.13	38 011.43	781 431.11	132 903.69	67 073.20	1 104 171.56
N.B.	2 074 299.56	1 038 065.35	7 057 090.26	2 455 845.96	496 412.31	13 121 713.44
QC	3 580 342.65	959 623.60	2 904 351.40	1 475 607.29	62 539.53	8 982 464.47
ONT.	537 508.80	315 923.42	42 592.05	-	-	896 024.27
MAN.	115.94	-	-	-	-	115.94
SASK.	-	-	385.46	896.97	-	1 282.43
ALTA.	1 267.82	-	118 636.44	-	20 053.91	139 958.17
B.C.	106.02	-	-	-	-	106.02
TOTAL	7 130 086.43	2 384 106.03	19 512 140.33	6 218 429.16	1 133 684.51	36 378 446.47

Rail - ARSA	$2 583 328.58
Rail - ARSSPA	$2 269 194.63
TOTAL RAIL	$4 852 523.21

Water - ARSSPA	$52 410.63
TOTAL	$52 410.63

Source: Correspondence with the Canadian Transport Commission.

Table 33

ACTIVITY ATLANTIC REGION FREIGHT ASSISTANCE PROGRAM
PAYMENTS BY PROVINCE, TRUCKS, 1979/80

Province	ARFA	ARSA	ARSTA	ARSSPA		TOTAL
				Selective	Provisional	
	($)	($)	($)	($)	($)	($)
NFLD.	140 586	16 066	202 010	2 235 360	442 439	3 036 461
N.S.	508 283	25 721	239 965	5 916 033	1 289 940	7 979 942
P.E.I.	56 144	28 728	28 803	686 185	155 400	955 260
N.B.	2 166 472	1 096 643	370 146	8 924 026	1 469 894	14 027 181
QC	4 070 450	1 106 076	118 242	5 192 652	302 958	10 790 378
ONT.	588 721	298 158	-	636	-	887 515
ALTA.	-	-	-	1 614	55 432	57 046
TOTAL	7 530 656	2 571 392	959 166	22 956 506	3 716 063	37 733 783

Rail - ARSA	$ 2 898 120
RAIL - ARSSPA	$ 8 004 106
TOTAL RAIL	$10 902 226

Water - ARSSPA	$225 062
TOTAL	$225 062

Source: Correspondence with the Canadian Transport Commission.

are excluded) in Nova Scotia. These licenses provided for the operation of trucking firms domiciled in the province of several thousand trucks (2 873 in 1979). In addition, there was 4 352 authorized vehicles in the extraprovincial category.

Another approach is to examine the overall volume of goods transported and the level of subsidy disbursements to trucking; though this approach also has certain imperfections. However, over the period of the 1970's there has been significant growth in the level of subsidy disbursements to trucking rising from $7 million in 1971/72 to $37.7 million in 1979/80 for the Atlantic Region. Even with adjustment for the inflationary component it is clear that the number of trips and tonnage carried in the region have expanded over the decade. It is interesting to note that the forecasted subsidy figures for 1975 for trucking, projected on a base year 1971, was significantly underestimated in a study done on selected commodities. [4]

On the question of whether there has been a shift from private to public carriers, detailed figures are difficult to secure. The trucking industry in Nova Scotia has grown, and it would appear that if there was a shift from private to public, in percentage terms the magnitude was small. Even if the latter aspect may have prevailed in the 1970's, interviews with various firms confirmed that recent trends indicate that this condition no longer prevails, but rather the reverse is to be in effect.

For the trucking industry as a whole it was also ascertained, from interviews with various firms, that subsidies were of varying magnitudes as a percentage of their revenues, ranging from 4% to 15% for Class I and II carriers. This is attributable, in part, to the products transported and the licenses held.

The impact of the subsidies may also be viewed from either the interprovincial or intraprovincial dimension. On the interprovincial level, it would appear that subsidies have contributed to an increase in the trucking industry. This is due to the fact that shippers of various products in Nova Scotia have been able to be more competitive in the major central market of Ontario and Québec. In addition, for certain goods the subsidies have enabled Nova Scotian firms to penetrate markets normally served by Québec.

On the intraprovicial level, a number of the major trucking firms stressed the factor of composition of the load characteristics. It was indicated that although a firm may account for a high percentage, say 70%, of the traffic in a particular area, only 20% to 30% of that traffic may be FTL. [5] This arises from the nature of production, the size of the economic base and the pattern of dispersion of towns and cities. Furthermore, many firms although resident in an outlying area, for example the Annapolis Valley or Truro, regard Halifax as the main base and the trip from there to other parts of the province was considered as the outgoing leg with the return trip as the backhaul leg.

Finally, there is a significant number of carriers below the Class III level and it could be inferred that availability of a subsidy has contributed to new entrants especially since the greater proportion of the load transported is LTL.

NOTES

[1] The MFRA subsidy applies to the "Select Territory" which includes the Maritime Provinces.

[2] John Heads. The Economic Basis for Transport Subsidies. Canadian Transport Commission, 1975.

F.R. Casas and Y. Kotowitz. Transport Subsidies and Regional Redistribution Policies. Canadian Transport Commission, 1976.

[3] H.J. Darling. An Historical Review of Direct Transport Subsidies in Canada. Canadian Transport Commission, 1975.

H. Mohring. "Transport Subsidies and the Economic Development of the Atlantic Provinces" in K.W. Studnicki Gizbert (ed.) Issues in Canadian Transport Policy, Toronto: MacMillan 1974 pp. 263-308.

[4] ADI Limited. "Estimates of 1975 Subsidy Payments on Selected Commodities under Intra-Regional Freight Subsidies". December 1974.

[5] The terms FTL and LTL, as used in this study, mean full truckload shipments and less than full truckload shipments respectively.

Chapter 10

CONCLUSIONS

Although it was indicated in a recent study that the effects of regulatory authorities in trucking are costly, difficult to administer, and should therefore be removed for for-hire motor carriers, [1] such a general application to the Nova Scotia scene has to be questioned.

One of the arguments against regulation is that it neither satisfies the consumer nor does it control capacity. On the other hand, deregulation can provide the optimal market solution. Nonetheless, the consequences must be assessed in terms of rates and service available to shippers, its impact on consumers, and the viability of trucking firms to provide a given level of service.

One of the approaches which can be used to examine the potential impact of deregulation is that of the industrial organization model -- structure, conduct, performance. This approach is somewhat summarized by Chow as follows:

> "Trucking has all of the structural attributes of a workably competitive industry; therefore, deregulated trucking performance would be superior to regulated trucking performance." [2]

One of the difficulties in arriving at a decision for or against deregulation is the establishment of an objective benchmark to judge performance. Different service levels, demand level and input cost conditions all suggest that one should expect different performance levels between provinces in the trucking industry.

The nature of the economy of Nova Scotia does not present similar conditions to those which prevail in provinces like Ontario and Alberta; where extraordinary demands are placed upon the transport sector at a specific period of time. A significant proportion of the traffic which moves between points in the provinces of Nova Scotia is LTL. As a result, if a meaningful comparison between the province of Nova Scotia and another is to be affected, the province of Saskatchewan would perhaps be the best selection.

Furthermore, the comparison of different provinces as affected by some authors has failed to accord sufficient attention to the heterogeneity of a province's industry, and such factors as average distance of truck shipments, nature of highways and local areas to be served. With a fair proportion of the movement of goods in Nova Scotia being LTL, the tendency towards larger firms, requiring a significant investment in terminal facilities, is reinforced.

From the structural dimension, it was found that the number of firms operating in the province of Nova Scotia at both the intra and interprovincial levels has increased. However, there was no significant change in the percentage (33%) of domiciled carriers in terms of the total number of carriers over the period 1975-78. Carriers domiciled in Nova Scotia comprise over 90% of the total intraprovincial carriers; while at the extraprovincial level they represent less than one-third of the carriers.

In terms of structure, there has been a recent development which could give cause for concern. Some of the major trucking firms have circumvented the regulation of applying for a license for a particular route or area, by buying control of a company with the license for the desired area. This has increased the market power for certain trucking firms and it is not far fetched to assert that for Nova Scotia and the Atlantic Region, shippers will be facing "big seven" firms in the not too distant future in the market for interprovincial traffic - - Day & Ross (which have purchased McKay's Transport, Atlantic Transport, Elroy's Transport), Midland, Maritime Ontario, Smith Transport, Speedway, Thompsons and Jodrey & Pulsifer (have recently purchased Mack's Transfer).

Another point to be noted is that the direct costs for applications in Nova Scotia are not as high as in other jurisdictions and, as indicated in an earlier chapter, the number of applicants denied a license in recent years has been small.

To assess conduct by trucking firms, several studies have used the price for for-hire services by the consuming public to determine the impact of regulation. However, a given price level in one province as contrasted to another province does not ensure greater stability in the industry will prevail in either of the provinces. Intuitively, one might expect that per unit price would be higher on LTL shipments than FTL shipments.

While in some provinces the major goal of trucking regulation was to promote earnings stability, in Nova Scotia there is an allied goal, namely, to supply shippers a fairly reliable service. Given the structure of the Nova Scotian economy, the purely competitive optimum derived from free competition, in terms of entry and rates as related to costs, must be adjusted for by the quality of service factor and the potential of rail abandonment in specific areas.

It is clear that for traffic to major hubs, e.g., Halifax-Dartmouth, Sydney, there is a fair degree of competition, whereas to outlying and small areas much less competition prevails.

To assess performance in terms of the for-hire trucking industry and then arrive at a decision for or against deregulation is difficult. With the structural characteristics, in terms of number of firms, one might have expected higher returns for Classes I and II, as contrasted to Class III, given they could exert a measure of oligopoly power in addition to having routes which generate more FTL shipments. However, this is not borne out in the analysis on rates of return; and it has to be concluded that while the number in a class would suggest the standard oligopoly model and some firms in the industry have a high profile, nonetheless, they are faced with a competitive fringe which exerts pressure on the rates structure.

Notwithstanding, when all three classes of Nova Scotia domiciled carriers are examined using various measures of performance net debt-worth ratio, liquidity ratio, current ratio to mention a few, the Nova Scotia domiciled carriers had a better performance than all the other Atlantic provinces in every instance, and Canada as a whole in most instances.

Furthermore, it is somewhat of a paradox that the small trucking firms under the present conditions are really operating under the "umbrella" of the Public Utilities Board, which ensures a modicum of protection to the current license holders. Deregulation would remove this protection.

The viability of the industry may also be inferred from the number of licenses cancelled. At the intraprovincial level, the number of licenses cancelled has fallen from a high of 44 in 1976 to 8 in 1979, while for extraprovincial the number has dropped from a high of 51 in 1975 to 19 in 1979. When taken in conjunction with the low percentage of applicants denied a license, it can be asserted that the for-hire trucking industry in Nova Scotia is relatively open.

Are the recommendations presented in the recent Economic Council's study on regulation appropriate for the Nova Scotia trucking industry? While certain recommendations appear acceptable, others have to be qualified or rejected. The ensuing comments will, however, pertain only to certain aspects of specific recommendations made in the Economic Council's study. First, with respect to Nova Scotia, the recommendation to eliminate rate filing does not appear warranted. This follows from the Council study's suggestion that (a) the P.U.B. should still retain broad powers to obtain rate information as it deems necessary and, (b) the current practice whereby a trucking firm has only to file a rate which may or may not be equalized by competitors. The Atlantic Tariff Bureau does not discourage competition, or limit independent action by its members; and the rate information is currently available.

Another recommendation is have a new body under the auspices of the Canadian Conference of Motor Transport Administrators (CCMTA) handling interprovincial licensing. This might simplify the process in terms of applications, but it could be less efficient, as contrasted to the present structure with individual boards, arising from a lack of knowledge of provincial economic conditions. Furthermore, the suggestion of adjustable waiting periods between two provinces could generate uneven rivalries.

Perhaps the most debatable recommendation from the Council's study is for the removal of the public convenience and necessity criterion for a trucking license, and the substitution of a waiting list of applicants subject to specific requirements. However, the granting of power to a Board to determine the duration of the waiting period as it sees fit could result in greater instability or greater rigidities.

The general approach of slowness to effecting changes in the regulatory sphere of the trucking industry in Nova Scotia is understandable, given the shipping public is fairly satisfied with the industry's performance. Of major concern to many shippers is, if a measure of deregulation is put into effect, whether or not certain parts of the province will receive a lower quality transport service; a factor which becomes accentuated if it is accompanied with rail abandonment. Given this potential difficulty, several shippers would appear to prefer to trade-off the potential of lower rates for potentially less stable service and prices. This conclusion is substantiated in a recent study conducted by the Atlantic Provinces Transportation Commission which found that one shipper or receiver in every 20 to 25 shippers is less concerned with the cost of trucking service, as compared to the desired level of service.

NOTES

[1] Economic Council of Canada. Reforming Regulation. Ottawa, 1981, pp. 22-24.

[2] G. Chow. "Studies of Intrastate Trucking Regulation - A Critique". Transportation Journal, Vol. 19/No. 4, Summer 1980, p. 25.

APPENDICES

Appendix A

SPECIFICATIONS AND CRITERIA APPLICABLE TO FREIGHT TRANSPORT OPERATIONS

(a) Service:

(i) general: all merchandise;

(ii) restricted: specified kinds of freight; contract (specified shipper); speciality (special equipment, i.e., furniture, haulaway, armoured, milk and cream, controlled temperature tank truck, tank trucks, lowbed and others);

(b) Route:

(i) designated route between terminus and points in between;

(ii) carrier may join routes for through-service;

(iii) terminal point includes radius of five miles; and

(iv) interlining permitted;

(c) Area:

(i) between localities of a defined area (county or area lying within defined boundaries); and

(ii) interlining permitted;

(d) Local:

(i) within the specified locality;

(ii) from the specified locality to another in a radius of 25 miles;

(iii) between 2 localities in a radius of 25 miles from the specified locality; and

(iv) within any locality in a radius of 25 miles from the specified locality;

(e) Frequency:

(i) regular (fixed intervals: hours, days or weeks); and

(ii) irregular;

(f) Interchange of vehicle:

  (i) has to be authorized; and

  (ii) contract of interchange must be filed;

(g) Casual leasing:

  (i) permitted on some specific occasions, such as mechanical failure of regular equipment, to carry perishable freight or other freight for urgent delivery;

  (ii) written report must be filed.

Source: Motor Vehicle Regulations. Province of Nova Scotia.

Appendix B

Table I

EMPLOYMENT BY OCCUPATION, NOVA SCOTIA, 1976-1979

Occupation	1976	1977	1978	1979
Managerial, Administrative, etc.	60 000	63 000	68 000	70 000
Clerical	50 000	49 000	49 000	49 000
Sales	34 000	32 000	33 000	36 000
Service	38 000	42 000	42 000	44 000
Primary occupation	19 000	18 000	20 000	19 000
Processing	37 000	39 000	42 000	44 000
Construction	25 000	24 000	23 000	25 000
Transportation	15 000	16 000	16 000	16 000
Materials handling and other crafts	12 000	12 000	12 000	14 000
TOTAL[1]	292 000	294 000	306 000	316 000

[1] May not add to total due to rounding.

Source: Statistics Canada. Labour Force Annual Averages, 1975-1978; and Historical Labour Force Statistics - Actual Data, Seasonal Factors, Seasonally Adjusted.

Table II

TRANSPORTATION MODES OF EXPORTS AND IMPORTS TO FINAL MARKETS FROM ORIGINS

Market Mode	U.K.	Scand.	No. Eur.	Med.	U.S.A.	Aust.	Far East	Carib.	World Wide	St. Pierre
Unknown	-	-	2	-	4	1	-	1	-	-
Air	1	-	-	-	2	-	-	-	-	-
Rail	-	-	-	-	3	-	-	-	-	-
Truck	-	-	-	-	50	-	-	-	-	-
Ship	21	4	24	5	15	7	8	38	1	6
Total	22	4	26	5	74	8	8	39	1	6

TRANSPORTATION MODES OF IMPORTS FROM ORIGINS

Market Mode	U.K.	Scand.	No. Eur.	Med.	U.S.A.	Aust.	Far East	Carib.	World Wide	St. Pierre
Unknown	-	-	1	-	1	-	-	-	-	-
Air	1	-	-	-	5	-	-	-	-	-
Rail	-	-	-	-	3	-	-	-	-	-
Truck	-	-	-	-	34	-	-	-	-	-
Ship	25	13	25	7	5	3	18	8	-	1
Total	26	13	26	7	48	3	18	8	0	1

Source: Canadian Marine Transportation Centre. Supplement Report to Nova Scotia Importers and Exporters, Canada, 1979.

Table III

COMMERCIAL FEE SCHEDULE

Motor Vehicles Trailers or Truck Tractor Semi-trailer Combinations

(Kilograms)

Exceeding	3 601 to 4 100	$ 74.00
	4 101 to 4 500	83.00
	4 501 to 5 000	98.00
	5 001 to 5 400	105.00
	5 401 to 5 900	120.00
	5 901 to 6 400	129.00
	6 401 to 6 800	145.00
	6 801 to 7 300	156.00
	7 301 to 7 700	174.00
	7 701 to 8 200	184.00
	8 201 to 8 600	203.00
	8 601 to 9 000	214.00
	9 001 to 9 500	231.00
	9 501 to 10 000	240.00
	10 001 to 10 400	258.00
	10 401 to 10 900	269.00
	10 901 to 11 300	289.00
	11 301 to 11 800	299.00
	11 801 to 12 200	317.00
	12 201 to 12 700	326.00
	12 701 to 13 200	345.00
	13 201 to 13 500	356.00
	13 501 to 14 100	375.00
	14 101 to 14 500	385.00
	14 501 to 15 000	404.00
	15 001 to 15 400	414.00
	15 401 to 16 000	433.00
	16 001 to 16 500	444.00
	16 501 to 17 000	464.00
	17 001 to 17 200	475.00
	17 201 to 17 700	496.00
	17 701 to 18 000	505.00
	18 001 to 18 600	526.00
	18 601 to 19 100	538.00
	19 101 to 19 500	550.00
	19 501 to 20 000	562.00
	20 001 to 20 500	574.00
	20 501 to 20 900	586.00
	20 901 to 21 500	598.00
	21 501 to 21 800	610.00
	21 801 to 22 200	622.00
	22 201 to 22 500	634.00
	22 501 to 23 100	646.00
	23 101 to 23 600	658.00
	23 601 to 24 000	670.00
	24 001 to 24 500	682.00
	24 501 to 25 000	694.00
	25 001 to 25 400	706.00
	25 401 to 25 900	718.00
	25 901 to 26 300	730.00
	26 301 to 26 800	742.00
Exceeding	26 801 to 27 000	$ 754.00
	27 001 to 27 700	766.00
	27 701 to 28 100	778.00
	28 101 to 28 600	790.00
	28 601 to 29 000	802.00
	29 001 to 29 500	814.00
	29 501 to 29 900	826.00
	29 901 to 30 500	838.00
	30 501 to 30 800	850.00
	30 801 to 31 300	862.00
	31 301 to 31 500	874.00
	31 501 to 32 200	886.00
	32 201 to 32 700	898.00
	32 701 to 33 100	910.00
	33 101 to 33 600	922.00
	33 601 to 34 000	934.00
	34 001 to 34 500	946.00
	34 501 to 34 900	958.00
	34 901 to 35 400	970.00
	35 401 to 35 800	982.00
	35 801 to 36 300	994.00
	36 301 to 36 700	1 006.00
	36 701 to 37 200	1 018.00
	37 201 to 37 600	1 030.00
	37 601 to 38 100	1 042.00
	38 101 to 38 500	1 054.00
	38 501 to 39 000	1 066.00
	39 001 to 39 500	1 078.00
	39 501 to 39 900	1 090.00
	39 901 to 40 500	1 102.00
	40 501 to 41 300	1 126.00
	41 301 to 41 700	1 138.00
	41 701 to 42 200	1 150.00
	42 201 to 42 600	1 162.00
	42 601 to 43 100	1 174.00
	43 101 to 43 500	1 186.00
	43 501 to 44 000	1 198.00
	44 001 to 44 500	1 210.00
	44 501 to 44 900	1 222.00
	44 901 to 45 400	1 234.00
	45 401 to 45 800	1 246.00
	45 801 to 46 300	1 258.00
	46 301 to 46 700	1 270.00
	46 701 to 47 200	1 282.00
	47 201 to 47 600	1 294.00
	47 601 to 48 100	1 306.00
	48 101 to 48 500	1 318.00
	48 501 to 49 000	1 330.00
	49 001 to 49 400	1 342.00
	49 401 to 50 000	1 354.00

Source: Motor Vehicle Regulations. Part II, March 1980.

Table IV

LABOUR - COST RATIO FOR TRUCKING INDUSTRY, 1975-1978

	1975	1976	1977	1978
All Classes				
Nova Scotia	35.4	33.1	37.0	35.6
Atlantic Canada (excluding N.S.)	26.8	26.4	24.9	25.2
Atlantic Canada	29.9	28.9	29.2	28.9
Canada	39.0	39.2	38.1	38.1
Class I				
Nova Scotia	37.2	36.6*	39.6	36.7
Atlantic Canada (excluding N.S.)	19.1	- **	21.0	21.7
Atlantic Canada	26.0	24.8	26.8	26.5
Canada	41.2	41.2	39.8	39.9
Class II				
Nova Scotia	30.6	28.6	33.9	35.0
Atlantic Canada (excluding N.S.)	29.0	32.1	27.7	27.6
Atlantic Canada	29.5	30.7	30.6	30.7
Canada	35.6	36.0	35.3	35.4
Class III				
Nova Scotia	36.7	33.5	35.7	34.5
Atlantic Canada (excluding N.S.)	34.9	32.8	31.1	30.3
Atlantic Canada	35.6	33.1	32.7	31.8
Canada	35.9	35.9	34.9	33.7

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table V

TOTAL OPERATING REVENUE PER POWER UNIT, 1975-1978

	1975	1976	1977	1978
All Classes				
Nova Scotia	44 074	48 359	49 533	55 772
Atlantic Canada (excluding N.S.)	47 557	65 165	75 477	79 234
Atlantic Canada	51 757	57 747	63 431	68 974
Canada	49 609	57 256	65 310	73 017
Clas I				
Nova Scotia	51 131	53 736*	58 091	71 534
Atlantic Canada (excluding N.S.)	127 874	- **	148 250	150 280
Atlantic Canada	81 780	89 044	99 044	110 478
Canada	59 823	69 317	77 837	91 005
Clas II				
Nova Scotia	62 182	66 577	57 959	53 988
Atlantic Canada (excluding N.S.)	58 672	61 752	72 953	72 632
Atlantic Canada	59 650	63 573	65 239	63 472
Canada	46 087	50 602	57 587	62 356
Clas III				
Nova Scotia	32 338	33 405	34 898	41 405
Atlantic Canada (excluding N.S.)	31 475	36 133	38 354	43 119
Atlantic Canada	31 843	35 010	37 040	42 502
Canada	33 823	38 657	41 477	46 443

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table VI

NET OPERATING REVENUE PER POWER UNIT, 1975-1978

	1975	1976	1977	1978
All Classes				
Nova Scotia	1 945	2 149	2 388	3 709
Atlantic Canada (excluding N.S.)	2 463	3 154	1 962	4 035
Atlantic Canada	2 240	2 710	2 160	3 892
Canada	2 190	2 338	2 730	3 014
Class I				
Nova Scotia	819	1 836*	1 677	4 457
Atlantic Canada (excluding N.S.)	7 047	- **	(885)	5 681
Atlantic Canada	3 307	4 287	513	5 062
Canada	2 663	2 617	2 933	2 864
Class II				
Nova Scotia	3 396	2 978	3 404	3 593
Atlantic Canada (excluding N.S.)	2 302	2 551	5 233	5 821
Atlantic Canada	2 607	2 712	4 292	4 726
Canada	1 612	2 159	2 574	3 050
Class III				
Nova Scotia	2 234	1 926	2 414	3 047
Atlantic Canada (excluding N.S.)	929	1 623	2 136	2 374
Atlantic Canada	1 486	1 748	2 242	2 617
Canada	1 836	1 934	2 467	3 281

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table VII

TOTAL OPERATING REVENUE PER EMPLOYEE, 1975-1978

	1975	1976	1977	1978
All Classes				
Nova Scotia	26 521	31 340	32 442	37 143
Atlantic Canada (excluding N.S.)	35 310	38 856	45 261	49 078
Atlantic Canada	31 488	35 692	29 589	44 070
Canada	31 647	35 412	39 626	42 596
Class I				
Nova Scotia	27 433	31 093*	33 045	40 627
Atlantic Canada (excluding N.S.)	52 219	- **	55 558	62 594
Atlantic Canada	38 990	44 522	45 611	53 182
Canada	32 129	36 355	39 294	43 511
Class II				
Nova Scotia	31 172	36 631	35 556	36 386
Atlantic Canada (excluding N.S.)	33 364	33 833	44 998	49 311
Atlantic Canada	32 696	34 886	40 127	42 937
Canada	33 556	36 336	41 265	44 301
Class III				
Nova Scotia	23 206	27 113	28 655	32 940
Atlantic Canada (excluding N.S.)	25 280	28 378	33 014	34 671
Atlantic Canada	24 337	27 867	31 307	34 043
Canada	28 272	31 274	34 108	37 929

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table VIII

NET OPERATING REVENUE PER EMPLOYEE, 1975-1978

	1975	1976	1977	1978
All Classes				
Nova Scotia	1 170	1 392	1 564	2 470
Atlantic Canada (excluding N.S.)	1 511	1 882	1 176	2 499
Atlantic Canada	1 363	1 675	1 348	2 487
Canada	1 397	1 446	1 656	1 759
Class I				
Nova Scotia	440	1 062*	954	2 531
Atlantic Canada (excluding N.S.)	2 878	- **	(332)	2 366
Atlantic Canada	1 576	2 143	236	2 437
Canada	1 430	1 373	1 480	1 369
Class II				
Nova Scotia	1 702	1 639	2 088	2 421
Atlantic Canada (excluding N.S.)	1 309	1 398	3 227	3 952
Atlantic Canada	1 429	1 488	2 640	3 197
Canada	1 173	1 551	1 844	2 167
Class III				
Nova Scotia	1 603	1 563	1 982	2 424
Atlantic Canada (excluding N.S.)	746	1 275	1 839	1 909
Atlantic Canada	1 136	1 391	1 895	2 096
Canada	1 535	1 564	2 029	2 679

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table IX

NET OPERATING REVENUE TO NET WORTH RATIO, 1975-1978

	1975 (%)	1976 (%)	1977 (%)	1978 (%)
All Classes				
Nova Scotia	20.0	22.9	23.2	35.9
Atlantic Canada (excluding N.S.)	25.8	33.1	29.6	63.9
Atlantic Canada	23.3	28.6	25.9	48.2
Canada	22.7	23.2	23.4	24.3
Class I				
Nova Scotia	8.0	19.1*	17.2	38.5
Atlantic Canada (excluding N.S.)	49.2	- **	(16.2)	338.0
Atlantic Canada	27.8	34.7	6.6	75.7
Canada	22.6	22.1	20.6	18.9
Class II				
Nova Scotia	26.2	23.4	20.9	25.3
Atlantic Canada (excluding N.S.)	19.9	22.9	48.6	41.0
Atlantic Canada	21.8	23.1	31.5	33.3
Canada	20.8	24.9	24.0	26.5
Class III				
Nova Scotia	27.4	26.6	36.2	48.4
Atlantic Canada (excluding N.S.)	14.6	29.1	38.2	43.0
Atlantic Canada	20.9	27.9	37.3	45.1
Canada	24.8	24.8	33.0	43.0

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table X

NET OPERATING REVENUE TO TOTAL ASSETS RATIO, 1975-1978

	1975	1976	1977	1978
All Classes				
Nova Scotia	7.8	8.5	9.3	12.7
Atlantic Canada (excluding N.S.)	7.3	9.3	5.5	11.4
Atlantic Canada	7.5	9.0	6.9	11.9
Canada	7.0	6.9	7.3	7.2
Class I				
Nova Scotia	3.5	8.2*	6.5	13.5
Atlantic Canada (excluding N.S.)	10.1	- **	(1.3)	9.9
Atlantic Canada	7.9	10.3	1.1	11.2
Canada	6.9	6.2	6.3	5.5
Class II				
Nova Scotia	8.3	7.2	9.6	10.0
Atlantic Canada (excluding N.S.)	7.4	8.8	16.5	16.1
Atlantic Canada	7.7	8.1	12.7	13.1
Canada	6.3	7.9	8.1	8.5
Class III				
Nova Scotia	10.9	10.5	12.9	14.9
Atlantic Canada (excluding N.S.)	4.1	7.1	10.5	10.3
Atlantic Canada	6.8	8.3	11.3	11.8
Canada	8.2	8.0	10.1	12.4

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table XI

LABOUR-COST RATIO, NOVA SCOTIA TRUCKING INDUSTRY, BY CLASS, 1975-1978

	1975	1976	1977	1978
All Classes	35.4	33.1	37.0	35.6
Class I	37.2	36.6*	39.6	36.7
Class II	30.6	28.6	33.9	35.0
Class III	36.7	33.5	35.7	34.5

Table XII

TOTAL OPERATING REVENUE PER POWER UNIT, NOVA SCOTIA, BY CLASS, 1975-1978

	1975	1976	1977	1978
All Classes	44 074	48 359	49 533	55 772
Class I	51 131	53 736*	58 091	71 534
Class II	62 182	66 577	57 959	53 988
Class III	32 338	33 405	34 898	41 405

Table XIII

NET OPERATING REVENUE PER POWER UNIT, NOVA SCOTIA, BY CLASS, 1975-1978

	1975	1976	1977	1978
All Classes	1 945	2 149	2 388	3 709
Class I	819	1 836*	1 677	4 457
Class II	3 396	2 978	3 404	3 593
Class III	2 234	1 926	2 414	3 047

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table XIV

TOTAL OPERATING REVENUE PER EMPLOYEE, NOVA SCOTIA, BY CLASS, 1975-1978

	1975	1976	1977	1978
All Classes	26 521	31 340	32 442	37 143
Class I	27 433	31 093*	33 045	40 627
Class II	31 172	36 631	35 556	36 386
Class III	23 206	27 113	28 655	32 940

Table XV

NET OPERATING REVENUE PER EMPLOYEE, NOVA SCOTIA, BY CLASS, 1975-1978

	1975	1976	1977	1978
All Classes	1 170	1 392	1 564	2 470
Class I	440	1 062*	954	2 531
Class II	1 702	1 639	2 088	2 421
Class III	1 603	1 563	1 982	2 424

Table XVI

NOVA SCOTIA, NET OPERATING REVENUE TO NET WORTH RATIO, 1975-1978

	1975	1976	1977	1978
All Classes	20.0	22.9	23.2	35.9
Class I	8.0	19.1*	17.2	38.5
Class II	26.2	23.4	20.9	25.3
Class III	27.4	26.6	36.2	48.4

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table XVII

NOVA SCOTIA, NET OPERATING REVENUE TO TOTAL ASSETS RATIO, 1975-1978

	1975	1976	1977	1978
All Classes	7.8	8.5	9.3	12.7
Class I	3.5	8.2*	6.5	13.5
Class II	8.3	7.2	9.6	10.0
Class III	10.9	10.5	12.9	14.9

*Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table XVIII

CURRENT LIABILITIES TO NET WORTH RATIO, 1975-1978

	1975	1976	1977	1978
All Classes				
Nova Scotia	0.99	1.10	0.89	1.12
Atlantic Canada (excluding N.S.)	1.65	1.61	3.21	3.19
Atlantic Canada	1.36	1.39	1.88	2.03
Canada	1.22	1.31	1.23	1.32
Class I				
Nova Scotia	0.[illegible]	0.83*	0.93	1.11
Atlantic Canada (excluding N.S.)	2.29	- **	9.16	23.63
Atlantic Canada	1.50	1.40	3.54	3.91
Canada	1.14	1.31	1.20	1.28
Class II				
Nova Scotia	1.37	1.39	0.64	0.93
Atlantic Canada (excluding N.S.)	1.15	1.05	1.29	1.08
Atlantic Canada	1.21	1.19	0.89	1.01
Canada	1.43	1.34	1.24	1.34
Class III				
Nova Scotia	0.98	1.10	1.24	1.44
Atlantic Canada (excluding N.S.)	1.77	2.03	2.12	2.09
Atlantic Canada	1.38	1.59	1.75	1.83
Canada	1.23	1.26	1.34	1.44

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table XIX

TOTAL LIABILITIES TO NET WORTH RATIO, 1975-1978

	1975	1976	1977	1978
All Classes				
Nova Scotia	1.58	1.68	1.51	1.82
Atlantic Canada (excluding N.S.)	2.54	2.57	4.42	4.62
Atlantic Canada	2.12	2.18	2.75	3.05
Canada	2.23	2.37	2.19	2.37
Class I				
Nova Scotia	1.28	1.31*	1.66	1.84
Atlantic Canada (excluding N.S.)	3.86	- **	11.65	33.30
Atlantic Canada	2.52	2.37	4.84	5.75
Canada	2.28	2.54	2.25	2.42
Class II				
Nova Scotia	2.17	2.22	1.18	1.52
Atlantic Canada (excluding N.S.)	1.69	1.61	1.94	1.55
Atlantic Canada	1.83	1.86	1.47	1.54
Canada	2.29	2.13	1.98	2.13
Class III				
Nova Scotia	1.52	1.54	1.82	2.24
Atlantic Canada (excluding N.S.)	2.56	3.07	2.65	3.18
Atlantic Canada	2.05	2.34	2.30	2.81
Canada	2.02	2.08	2.27	2.47

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table XX

REVENUE EQUIPMENT ASSETS TO NET WORTH RATIO, 1975-1978

	1975	1976	1977	1978
All Classes				
Nova Scotia	0.92	1.04	1.02	1.52
Atlantic Canada (excluding N.S.)	1.51	1.50	2.15	1.69
Atlantic Canada	1.25	1.30	1.50	1.61
Canada	1.13	1.16	1.13	1.20
Class I				
Nova Scotia	0.57	0.69*	0.96	1.05
Atlantic Canada (excluding N.S.)	1.84	- **	4.33	8.88
Atlantic Canada	1.18	1.25	2.03	2.02
Canada	1.02	1.08	1.03	1.08
Class II				
Nova Scotia	1.22	1.14	0.85	0.97
Atlantic Canada (excluding N.S.)	1.22	1.00	1.29	1.19
Atlantic Canada	1.22	1.11	1.02	1.08
Canada	1.32	1.24	1.15	1.21
Class III				
Nova Scotia	1.07	1.33	1.41	1.81
Atlantic Canada (excluding N.S.)	1.61	1.81	1.70	2.08
Atlantic Canada	1.35	1.58	1.58	1.97
Canada	1.26	1.34	1.47	1.65

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Statistics Canada. Motor Carriers Freight and Household Goods Movers, Various Issues.

Table XXI

TOTAL FIXED ASSETS TO NET WORTH RATIO, 1975-1978

	1975	1976	1977	1978
All Classes				
Nova Scotia	1.46	1.55	1.48	1.69
Atlantic Canada (excluding N.S.)	2.09	2.10	3.02	3.05
Atlantic Canada	1.82	1.86	2.13	2.29
Canada	2.12	2.21	2.06	2.15
Class I				
Nova Scotia	1.07	1.17*	1.40	1.49
Atlantic Canada (excluding N.S.)	2.62	- **	6.16	14.83
Atlantic Canada	1.82	1.79	2.91	3.15
Canada	2.19	3.25	2.11	2.18
Class II				
Nova Scotia	1.77	1.78	1.27	1.59
Atlantic Canada (excluding N.S.)	1.72	1.61	1.77	1.54
Atlantic Canada	1.73	1.68	1.46	1.57
Canada	2.03	1.94	1.79	1.88
Class III				
Nova Scotia	1.64	1.73	1.93	2.22
Atlantic Canada (excluding N.S.)	2.13	2.55	2.38	2.73
Atlantic Canada	1.89	2.16	2.19	2.53
Canada	1.98	2.06	2.20	2.34

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

** Figures for Atlantic Canada (excluding Nova Scotia) could not be obtained because Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Calculation based on earlier tables.

Table XXII

NOVA SCOTIA, CURRENT LIABILITIES TO NET WORTH RATIO, 1975-1978

	1975	1976	1977	1978
All Classes	0.99	1.10	0.89	1.12
Class I	0.77	0.83*	0.93	1.11
Class II	1.37	1.39	0.64	0.93
Class III	0.98	1.10	1.24	1.44

Table XXIII

NOVA SCOTIA, TOTAL LIABILITIES TO NET WORTH RATIO, 1975-1978

	1975	1976	1977	1978
All Classes	1.58	1.68	1.51	1.82
Class I	1.28	1.31*	1.66	1.84
Class II	2.17	2.22	1.18	1.52
Class III	1.52	1.54	1.82	2.24

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Calculation based on earlier tables.

Table XXIV

NOVA SCOTIA, REVENUE EQUIPMENT ASSETS TO NET WORTH RATIO, 1975-1978

	1975	1976	1977	1978
All Classes	0.92	1.04	1.02	1.52
Class I	0.57	0.69*	0.96	1.05
Class II	1.22	1.14	0.85	0.97
Class III	1.07	1.33	1.41	1.81

Table XXV

NOVA SCOTIA, TOTAL FIXED ASSETS TO NET WORTH RATIO, 1975-1978

	1975	1976	1977	1978
All Classes	1.46	1.55	1.48	1.69
Class I	1.07	1.17*	1.40	1.49
Class II	1.77	1.78	1.27	1.59
Class III	1.64	1.73	1.93	2.22

* Newfoundland and Nova Scotia domiciled carriers were grouped to meet confidentiality requirements.

Source: Calculation based on earlier tables.

THE FOR-HIRE TRUCKING INDUSTRY IN THE ATLANTIC PROVINCES

CASE 2

THE TRUCKING INDUSTRY IN THE PROVINCE OF NEW BRUNSWICK

An Assessment of the Economic and Regulatory Environment

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Chapter 1

PROFILE OF THE NEW BRUNSWICK ECONOMY

A brief profile of the New Brunswick economy during the study period 1975 to 1978 is presented in this chapter. It is not detailed nor all inclusive. Rather, it is designed to present data on the nature of the economy in question and the relative importance of various sectors.

1.1 Population and Labour Force

Data on the population estimates for Canada and New Brunswick for selected years are shown in Table 1.1 below. After experiencing noticeable declines in the fraction of Canadian population in the province, the relationship appeared to stabilize in the 1970's and has shown some signs of an increase. The increase, however, is small and it is not possible to determine whether it is the result of errors of estimate in the intercensus estimates or in fact that the trend has reversed.

Table 1.1

POPULATION - NEW BRUNSWICK AND CANADA -
SELECTED YEARS
(000's)

Year	New Brunswick	% Change	Canada	% Change	N.B. as % of Canada
1961	598	-	18 238	-	3.3
1966	617	3.2	20 141	9.7	3.1
1971	635	2.9	21 568	7.1	2.9
1976	677	6.6	22 993	6.6	2.9
1978	695	2.7	23 483	2.2	3.0

Source: Census of Canada.

New Brunswick, reflecting the rest of the Atlantic Provinces, had suffered high rates of out-migration during the 1950's and 1960's. As a consequence, there exists an unfavorable age distribution of the population. In 1978, for example, 58.4% of the New Brunswick population was 17 years of age or younger. In addition, 16.1% of the population was over 65. This resulted in a dependency ratio of 74.5%. The equivalent Canadian

Table 1.2

LABOUR FORCE STATISTICS

Year	Population 15+ ('000)	Labour Force ('000)	Employed ('000)	Unemployed ('000)	Unemployment Rate (%)	Participation Rate (%)
1970	411	205	192	13	6.3	49.9
1971	422	210	197	13	6.1	49.8
1972	430	220	205	15	7.0	51.2
1973	439	232	214	18	7.7	52.8
1974	448	239	221	18	7.5	53.3
1975	461	248	224	24	9.8	53.8
1976	473	254	226	28	11.0	53.6
1977	485	261	226	35	13.2	53.7
1978	496	273	238	34	12.6	55.0
1979	506	280	249	31	11.1	55.3

Source: Statistics Canada, 71-201.

figures are 50.3%, 14.9%, and 65.2%, respectively. Stated another way, it is found that nationally, 34.8% of the population fell into the usually accepted labour force age bracket, while only 25.5% of the New Brunswick population did so.

Data on the labour force for New Brunswick are set out in Table 1.2 for the period 1970 to 1979. The table reveals the rising participation ratio over the decade, the increase being 10% between the first and last years shown. As a result of the rising participation ratio, the labour force grew more rapidly, by 36.6%, than did the labour force population which rose by 23.1%. Employment increased by 29.7% over the period, more rapidly than the labour force population, but less rapidly than the labour force. As a result, the number of unemployed rose by 138.6%, the unemployment rate rising from 6.3% in 1970 to 11.1% in 1979.

Employment by industry data is set out in Table 1.3. It reveals that in 1976, the industry groups trade, finance, insurance and real estate, service and public administration accounted for 58% of total employment. This fraction rose to 59.8% in 1979. Agriculture, manufacturing and other primary industries accounted for 22.1% of total employment in 1976, and the same fraction in 1979. Construction and transportation, communications and other utilities employment accounted for the balance. The fraction of the New Brunswick labour force engaged in what is typically referred to as the goods-producing industries is considerably lower than the equivalent national figure. The fraction accounted for by the true service sectors listed above is about the same in both instances. In New Brunswick, there are proportionately more people employed in construction and the utilities than is the case nationally.

Table 1.3

EMPLOYED BY INDUSTRY
(thousands)

Industry	1976	1977	1978	1979
Agriculture	6	5	4	6
Non-Agriculture	220	221	234	243
Other Primary Industries	11	10	10	10
Manufacturing	33	34	39	39
Construction	19	17	18	20
Trade	44	45	45	48
Transportation, Communication & other Utilities	25	26	25	25
Finance, Insurance & Real Estate	9	9	9	11
Service	59	63	69	70
Public Administration	19	18	19	20

Source: Statistics Canada, 71-001.

1.2 Personal Income, Value Added and Investment

Information on personal income per capita for New Brunswick, Ontario and Canada for selected years is shown in Table 1.4. The data reveal a slowly closing gap between New Brunswick and the other two up to 1975, and a widening of the gap since that time. In 1975, the per capita income in New Brunswick reached 77.2% of the national average. The ratio then declined in each successive year, reaching 73.2% in 1979. It should be noted that data for 1979 are preliminary in nature. The measure is not altogether satisfactory, for it must be noted that despite the narrowing of the relative income disparity, the absolute gap widened in the period under review. The absolute gap between New Brunswick and Canada, for example, increased by 3.6 times between 1965 and 1979 despite the relative narrowing.

Total personal income in the province rose by 5.2 times during the period 1965 to 1979. Labour income rose by the same proportion. Farm income increased only 1.7 times, while business income increased by 2.7 times. Both business income, which increased 6.6 times, and transfer payments, which rose 7.8 times, exceeded the average growth. The latter increased from 13.1% of total personal income to 19.8% of total personal income. If one considers changes in personal income with transfer payments excluded, a first approximation for earned income, he finds that the increase was 4.8 times between 1965 and 1979.

Table 1.4

PER CAPITA PERSONAL INCOME - NEW BRUNSWICK, ONTARIO AND CANADA - SELECTED YEARS
(dollars)

Year	New Brunswick	Ontario	Canada	% of Ontario	% of Canada
1965	1 431	2 436	2 091	58.7	68.5
1970	2 252	3 705	3 129	60.8	72.0
1975	4 630	6 596	6 001	70.2	77.2
1977	5 493	8 045	7 361	68.3	74.6
1979 #	6 506	9 605	8 887	67.7	73.2

# Preliminary

Source: Statistics Canada, 13-201.

Data on census value added in the various goods-producing sectors are shown in Table 1.5 for the period 1972 to 1978. The data are in nominal dollars, and reveal considerable growth for the period as a whole. However, closer inspection reveals that most of the increases occurred in the period up to 1974. Since then total value added has risen by only 28%, a rate less

Table 1.5

CENSUS VALUE ADDED IN GOODS-PRODUCING INDUSTRIES
(thousands of dollars)

Industry	1972	1973	1974	1975	1976	1977	1978*
Agriculture	32 587	57 686	76 456	45 780	62 791	56 979	64 000
Forestry	40 531	60 763	72 759	63 961	74 403	72 965	75 000
Fisheries	20 037	22 217	22 080	25 518	25 076	34 367	43 000
Trapping	294	415	805	465	582	702	1 400
Mining	39 764	73 467	84 530	79 454	69 698	79 538	90 000
Electric Power	49 342	58 177	62 592	71 993	96 680	121 400	135 000
Manufacturers	356 528	457 239	628 891	610 085	627 530	677 749	800 000
Construction	164 744	245 857	369 053	420 845	478 539	451 798	480 000
Total	703 827	975 821	1 317 166	1 318 101	1 435 299	1 495 498	1 688 400
% Change	11.6	38.6	35.0	0.1	8.9	4.2	12.9

Source: Statistics Canada, 61-202.

than the general inflation rate, so that there has been some decline in real terms. In 1978, the manufacturing sector accounted for 47.4% of the total, with construction accounting for a further 28.4%. The value added in both of these sectors more than doubled in the period under review.

Public and private investment figures are shown in Table 1.6. Between 1973 and 1978, new capital expenditures in the province doubled. Most of the new construction, 84.3% in 1978, was accounted for by the public sector, by housing, and by utilities. The manufacturing sector, by contrast, accounted for only 4% of total new construction. As one would naturally expect, the situation is different when one turns to a consideration of new machinery and equipment. In this case, the manufacturing sector accounted for 21.4% of the total. However, manufacturing investment in new equipment was still less than half of that in utilities which accounted for 46.5% of the total. These data suggest that the nature of the provincial economy in the years immediately ahead will not be substantially different from the present situation.

1.3 Output Volumes - Specific Sectors

This section of the economic profile will briefly examine some of the available data on the outputs of various sectors of the economy to provide some background for the discussions which follow.

Total forest production rose during most years up to 1973, reaching a peak in that year. It reached the bottom of a valley in 1975, and increased over the next two years. It failed, however, to attain the previous output level. As a result, production in 1977 was only 1.4 times the level of 1964. Within the sector, there have been significant shifts. Production of pulpwood increased substantially in the period, while that of saw logs, bolts, and fuelwood declined.

In the aggregate, it appears most improbable that there will be any significant increase in forest production in the future. As a consequence of the inroads of the spruce budworm and historic level of forest management practices of the past, the resource will permit only modest increases in softwood harvesting in the future. There has been, however, a significant change in forest policy during the study period. This has involved the adoption of the principle that the private woodlot owner is to be one of the primary sources of fibre supply for the pulp mills and the cancellation of some of the long-term leases of Crown lands held by sawmills and pulpmills. The exact nature of the impact of these changes on the transportation system cannot be assessed at this time. It seems highly probable, however, that while the total amount of wood harvested will not significantly change, the distribution of that wood to users will change. Most probably, there will be an increase in the proportion of wood moved by truck, and the average length of haul to the site will change. However, whether the average haul length will increase or decrease will require several years of operating experience to evaluate such new developments as shipments from the Miramichi region to the Saint John area and should such trends continue, the average length of haul could increase.

Table 1.6

PUBLIC AND PRIVATE INVESTMENT
(millions of dollars)

	1973	1974	1975	1976	1977	1978[1]	1979[2]
New Capital Expenditures	636.0	975.8	1 159.3	1 176.7	1 154.9	1 272.9	1 395.4
New Construction:	427.1	649.7	727.1	766.4	737.5	783.7	845.5
Primary & Construction	14.1	27.4	41.4	32.2	38.8	21.7	33.3
Manufacturing	26.8	98.4	136.2	45.5	32.8	29.7	31.6
Utilities	60.6	99.8	95.7	140.8	173.6	176.9	164.4
Trade & Finance	33.3	35.2	35.3	48.0	50.3	72.0	59.0
Housing	166.3	185.1	201.4	263.6	196.1	236.8	229.3
Gov't & Institutional	126.0	203.8	217.1	236.3	246.5	246.6	327.9
New Machinery & Equipment:	208.0	326.1	432.2	410.3	417.4	489.2	549.9
Primary & Construction	41.2	51.7	59.1	80.4	72.0	75.9	87.9
Manufacturing	44.6	92.4	120.1	93.7	84.5	104.7	121.5
Utilities	70.5	125.8	187.1	175.0	190.0	227.7	224.1
Trade & Finance	35.0	40.1	39.8	41.6	49.0	58.3	88.6
Housing	-	-	-	-	-	-	-
Gov't & Institutional	17.6	16.1	26.1	19.6	21.5	22.6	27.8
Repair Expenditures	184.2	222.0	236.0	281.5	289.3	316.7	347.7
Primary & Construction	23.2	29.8	34.0	42.6	43.9	46.4	52.4
Manufacturing	32.9	42.9	48.2	64.8	60.9	70.9	79.5
Utilities	46.3	56.9	60.5	63.5	72.1	77.0	84.5
Trade & Finance	8.8	10.6	12.1	13.7	16.8	18.9	20.6
Housing	30.0	31.0	32.8	38.5	41.4	45.7	49.9
Gov't & Institutional	43.0	50.8	48.4	58.4	54.2	57.8	60.8
Total Investment	820.2	1 197.8	1 395.3	1 458.2	1 444.2	1 589.6	1 743.1

[1] Preliminary actual.

[2] Revised intentions.

Source: Statistics Canada, 61-205 & 61-206.

Data on the New Brunswick fishing industry are shown in Table 1.7. The table reveals that in volume terms there has been little change in the period under review. The volume of fish landings peaked in 1968, reached a minimum value in 1974, and in 1978 were not substantially different from the 1965 levels. While the year to year pattern in employment was different, it should be noted that the 1978 level was not substantially different from that of 1965. There has been a considerable rise in value of the catch, this being the consequence of the general upward pressure on prices and alterations in the species mix.

It seems highly improbable that there will be any significant increase in the volumes of landings in the near future. Furthermore, given the volumes, increases would not have substantial impacts upon the transportation system.

Data on mineral production are shown in Table 1.8 for 1978 and 1979. The three largest commodities tend to move by rail, and there are no indications that this trend will change. In the sector, the only major development foreseen is related to the potash deposits of south-central New Brunswick. In the near future, there will be considerable volumes of this commodity flowing through the port of Saint John. At the present time, it is uncertain as to the mode of transport to be employed from each of the potential sites. However, there appears to be potential for utilizing the truck mode from certain locations. Should truck be the chosen mode, there could be long-term implications for highway construction on parts of route land associated collector highways.

Finally, data on the leading manufacturing industries are shown in Table 1.9. Between 1971 and 1977, the number of firms in the sector fell by 18.7%, while the total employment rose by 4.1%. This suggests that the firms disappearing were relatively small, and that these tended to be replaced by a smaller number of larger firms. The most significant decline took place in the food and beverage industry where 72 firms disappeared. Employment, however, fell by only 200, implying expansion in other firms.

Unfortunately, in many instances, volume figures are not available. Nevertheless, it is possible to make some general statements concerning likely future trends in the sector. It seems safe to take the position that neither the wood industry nor the paper and allied industries will expand significantly in volume terms in the near future. Some expansion of the food and beverage industry is possible, but to a large extent, this will most probably involve the further processing of products presently exported from the region in an unprocessed state. As a consequence, total volumes should not appreciably increase. The remainder of the sector is relatively small, and while there will be increases in volumes, these will not appreciably increase total commodity flows within or from the province.

In summary, while there will be real growth in most of the sectors considered here in the future, there appear to be few implications for the trucking industry. In the raw forest sector, shifts in the distribution pattern will increase flows on some links, as well as increase transportation charges and subsidy payments. Little change is foreseen in the fishing sector. What happens in the mining sector is largely a function

Table 1.7

PRINICPAL STATISTICS OF THE FISHING INDUSTRY

Year	Sea Fish Landings Quantity (metric tonnes)	Sea Fish Landings Value ($'000)	Number of Fishermen
1965	131 836	10 525	6 102
1966	157 048	11 005	5 822
1967	160 962	10 789	5 665
1968	245 108	15 487	5 766
1969	233 410	15 744	5 358
1970	202 062	17 370	5 081
1971	161 502	15 959	5 148
1972	158 091	19 697	5 067
1973	127 366	21 940	4 997
1974	110 467	24 283	4 898
1975	121 172	24 930	5 118
1976	115 725	24 984	5 486
1977	131 937	34 167	6 076
1978	133 549	42 949	6 100

Sources: Statistics Canada, 24 201, 24-204 and Environment Canada.

Table 1.8

MINERAL PRODUCTION - QUANTITY

Mineral	Unit	1978	1979p
Copper	thousands of kilograms	10 341	10 913
Lead	thousands of kilograms	72 693	75 673
Zinc	thousands of kilograms	204 226	264 580
Gypsum	thousands of metric tonnes	50	52
Peat Moss	thousands of metric tonnes	119	119
Sulphur	thousands of metric tonnes	56	61
Sand, Gravel	thousands of metric tonnes	7 016	7 257
Stone	thousands of metric tonnes	3 121	3 175
Coal	thousands of metric tonnes	315	305
Crude Oil	thousands of cubic metres	1	1
Natural Gas	thousands of cubic metres	2	3

Sources: Statistics Canada, 26-202 & Dept. of Natural Resources.

Table 1.9

LEADING MANUFACTURING INDUSTRIES

			Total Activity		Manufacturing Activity		
						Shipments	
Industry		Estab'nt (#)	Employees (#)	Wages & Salaries	Value Added	Value	Distribution (%)
				(thousands of dollars)			
Food & Beverage	1971	204	9 361	44 587	92 720	258 621	32.1
	1977	132	9 161	89 703	182 376	507 002	24.8
Wood	1971	128	3 570	17 242	28 597	71 443	8.9
	1977	115	3 487	35 341	55 452	144 560	7.1
Paper & Allied	1971	20	5 603	49 626	58 171	197 615	24.5
	1977	19	6 124	106 796	174 605	519 412	25.5
Metal Fabricating	1971	41	1 642	11 228	17 533	31 920	4.0
	1977	43	1 367	17 248	25 753	51 412	2.5
Printing, Publishing & Allied	1971	48	1 029	6 654	10 615	14 552	1.8
	1977	40	1 085	13 318	20 753	29 662	1.5
Electrical Products	1971	6	920	5 173	10 321	19 651	2.4
	1977	6	834	8 765	15 868	33 471	1.6
Non-metallic Mineral Products	1971	36	954	5 792	11 324	20 522	2.5
	1977	34	1 250	16 657	35 299	69 112	3.4
Chemical & Chemical Products	1971	17	432	2 897	8 421	23 623	2.9
	1977	10	332	4 779	14 465	42 115	2.1
Other Manufacturing	1971	109	5 054	29 919	42 714	168 860	20.9
	1977	96	6 085	78 437	117 427	643 347	31.5
Total	1971	609	28 565	173 118	280 416	806 806	100.0
	1977	495	29 725	371 044	641 547	2 040 500	100.0

Source: Statistics Canada, 31-203.

of the model choice made by the potash companies. Large increases in the volumes of manufactured goods produced in the province are not foreseen in the near future.

1.4 Transportation and Economic Development - An Overview

Transportation has logically been an important factor in the economic development of New Brunswick. Early settlement patterns and industrial developments were tied very closely to the rivers and harbours. Later, the maritime provinces' industrial and business community relied on access to the rail lines within the province.

The full development of the highway system in New Brunswick was not undertaken until the end of World War II. At that time the effort was concentrated on the development of a system of major and secondary roads capable of handling the expansion in automobile activity. With the development of the Trans-Canada Highway agreement in the early 1950's, work started on the construction of that part of the Nation's arterial highway link through the province with construction to "all weather" standards.

Much of the highway development work in the recent past has been directed to the development of an arterial highway system throughout the province. In the 1950's and 1960's, considerable work was completed on the main TCH arterial link through the province as well as the development of other major arteries including Route 1 along the south side of the province. In the late 1960's and 1970's, substantial progress was made in the construction of the east side of the province - specifically on Route 11.

Today's arterial highway system consists of approximately 1 800 miles of highway of which 900 miles are considered to be fully capable of supporting design loadings on an all year basis. In addition, some 1 400 miles of collector highway and 10 000 miles of public local highways service the province.

The development of trucking in the province paralleled the development of the highway network and specifically the development of the arterial highway system. This network enabled the employment of the trucking mode initially on a regional and later on a national scale. The development of the Trans-Canada Highway through New Brunswick was considered to be important to all maritime provinces as it is an important link between central Canada and the Atlantic Region.

The next major factor in the development of the trucking industry in the region which occurred in the late 1960's was the extension of the freight rates subsidy to the trucking industry. The single largest expansion occurred after the period covered by this data but the full impact cannot be measured due to the general economic expansion which was already taking place.

1.5 Summary and Conclusions

This chapter has briefly reviewed the economy of the province of New Brunswick to provide background for the analysis of the trucking industry.

The review began by considering the human resource side. Reversing the earlier trend, the provincial population appeared to rise more quickly than Canada's between 1976 and 1978. New Brunswick's dependency ratio is higher than the Canadian average, and this has some serious implications for future development efforts. Reflecting a rising participation ratio, the labour force grew more quickly than the labour force population. Despite significant gains in employment, the unemployment rate increased during the 1970's.

Per capita, personal income rose sharply in New Brunswick in the period since 1965. The relative income gap has narrowed, but the absolute gap has increased several-fold in the period under review. Transfer payments became an ever increasing proportion of personal income in New Brunswick, accounting for 19.8% of the total in 1979 - up from 13.1% in 1965. Value added in the goods-producing sector increased sharply until 1974, but has failed to keep up to the general inflation rate since that time. In 1978, the manufacturing sector accounted for 47.4% of value added. The housing sector, public utilities and the public sector accounted for 84.3% of the new construction in 1978. Investment in new machinery and equipment was led by utilities with 46.5% of the total. Manufacturing accounted for only 21.4% of the total. These data suggest that the nature of the provincial economy in the years immediately ahead will not be substantially different from that of the years just past.

With reference to specific sectors, the observation can be made that there is unlikely to be any significant expansion of the forestry sector in the years ahead. Some different pattern of utilization of wood inputs is likely, and thus some increase in the volumes of truck flows is likely to occur. Mineral production will rise, though it is unclear at the moment whether this increased volume will move by rail or truck or a combination of these modes. Significant increases in the flows of fish products and manufactured goods are not forecasted. Overall volumes are, therefore, not likely to rise significantly in the next five years or so.

Chapter 2

OVERVIEW OF TRUCKING INDUSTRY IN NEW BRUNSWICK

2.1 Introduction

Information on trucking in Canada is indeed difficult to obtain as a limited amount of reliable data is collected on a regular basis on this aspect of transportation. This appears to have prompted Mr. E.J. Benson to entitle his 1974 address to the Canadian Trucking Association [1] "The Unknown Industry". Indeed, the very basic information regarding the number of registered trucks using the province's roadways is difficult to obtain, due to historical inadequacies in the data handling techniques. In 1981, the New Brunswick Department of Transportation will have an improved level of information available to it, and these basic truck population data will be more accessible. However, there is not an ongoing reliable data base on factual data of this nature for the trucking industry in Atlantic Canada. Developing an understanding for the industry has largely been accomplished through a series of studies developed by the governments of Canada and the individual provinces.

Within Atlantic Canada, two major sources of information on trucking have been developed in recent years. These include the 1976 Truck Origin-Destination Survey and the 1979 Highway Origin-Destination Survey. The results of both of these surveys are used in this report to develop an understanding of the local industry.

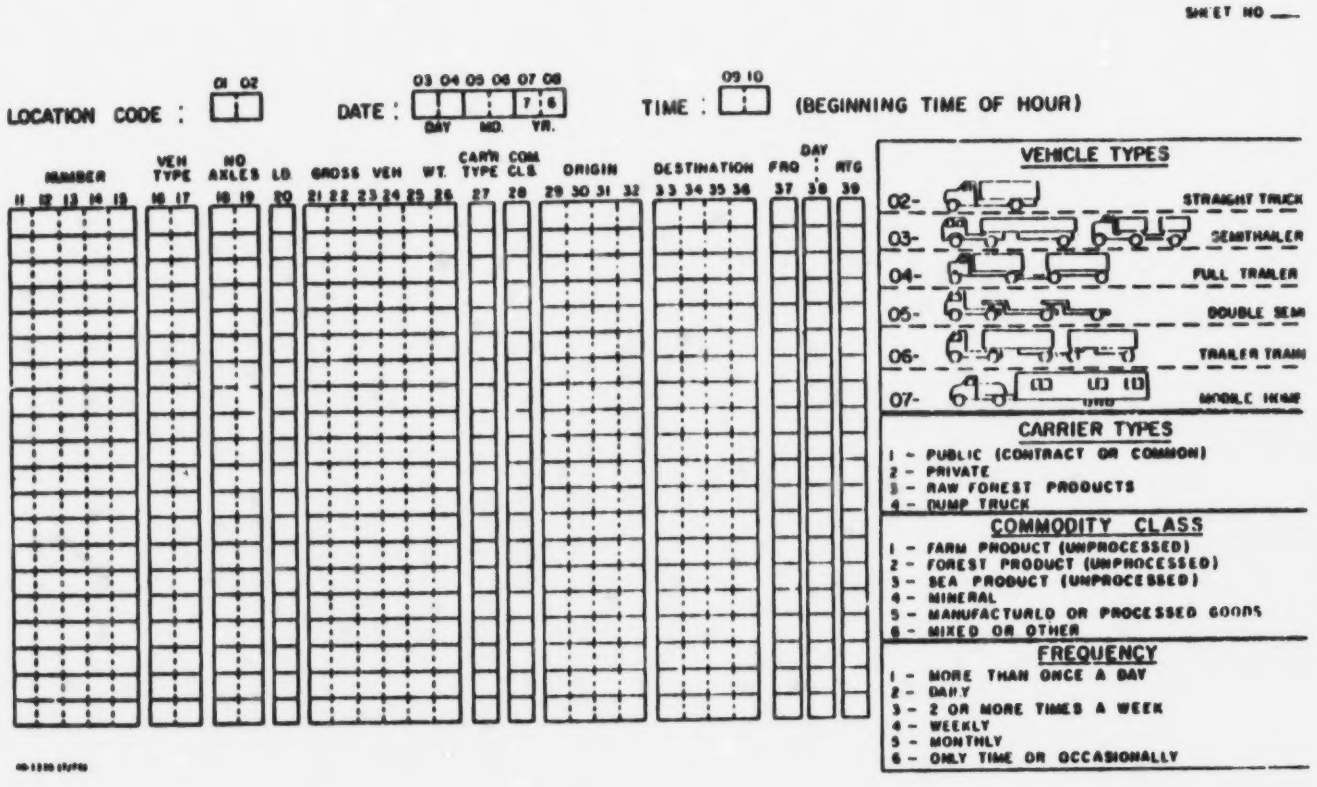
2.2 The 1976 Truck Origin-Destination Study

The 1976 Truck Origin-Destination Study was initiated through the Federal Departments of Transport and of Regional Economic Expansion together with the four Atlantic Provinces. The study was to aid in the development of a federally funded primary highways ten-year highway program. (DREE's specific interest was in northern New Brunswick.) Within this framework, basic information was required to determine the volumes and nature of truck traffic using the primary highway system in the Atlantic Provinces. It should be noted that the survey has the objective to examine trucks, truck loads, axle loads etc., related to pavement strength requirements. The use of the data for an indepth examination of the trucking industry was a secondary objective.

The survey period covered a full seven days from August 23 to August 29, 1976, at major truck scales and at other selected locations on the primary and arterial highway systems throughout the region. The survey was conducted for seven consecutive days, 24 hours a day. Each province conducted the survey within its boundaries utilizing its own manpower resources. The interview form, Figure 2.2.1, illustrates the nature of the survey and the questions asked during the interview.

Figure 2.2.1

ATLANTIC PROVINCES
1976 TRUCK ORIGIN-DESTINATION SURVEY



SHEET NO ___

LOCATION CODE : 01 02 ☐☐

DATE : 03 04 05 06 07 08 ☐☐ ☐☐ 7 6 (DAY MO. YR.)

TIME : 09 10 ☐☐ (BEGINNING TIME OF HOUR)

NUMBER	VEH TYPE	NO AXLES	LD.	GROSS VEH WT.	CARR TYPE	COM CLS	ORIGIN	DESTINATION	FRQ	DAY	RTG
11 12 13 14 15	16 17	18 19	20	21 22 23 24 25 26	27	28	29 30 31 32	33 34 35 36	37	38	39

VEHICLE TYPES

02- STRAIGHT TRUCK
03- SEMITRAILER
04- FULL TRAILER
05- DOUBLE SEMI
06- TRAILER TRAIN
07- MOBILE HOME

CARRIER TYPES

1 - PUBLIC (CONTRACT OR COMMON)
2 - PRIVATE
3 - RAW FOREST PRODUCTS
4 - DUMP TRUCK

COMMODITY CLASS

1 - FARM PRODUCT (UNPROCESSED)
2 - FOREST PRODUCT (UNPROCESSED)
3 - SEA PRODUCT (UNPROCESSED)
4 - MINERAL
5 - MANUFACTURED OR PROCESSED GOODS
6 - MIXED OR OTHER

FREQUENCY

1 - MORE THAN ONCE A DAY
2 - DAILY
3 - 2 OR MORE TIMES A WEEK
4 - WEEKLY
5 - MONTHLY
6 - ONLY TIME OR OCCASIONALLY

Since it was a primary highway survey, it was rather "broad brush" in nature. No attempt was made to examine in detail all trucking movements. The study was orientated toward obtaining major traffic movements on the arterial system. These movements of a local nature were not evaluated in a detailed manner.

The use of this survey for an examination of the New Brunswick trucking industry, as intended in this project, has a number of inherent problems. It must be emphasized that these faults are related to the particular use in this project rather than the surveys intended use and should not be, therefore, interpreted as criticism of the survey itself. From the point of view of this project, the survey suffers from the following limitations:

(a) Origins and destinations internal to the region were not established, rather the points at which traffic entered the region were considered to be the trip origins and/or destinations;

(b) The classification of goods recorded in the interview was very basic and few commodity examinations are possible; and

(c) A commodity flow is difficult to estimate due to the seasonal nature of most commodity shipments and the intensive seven day nature of the survey.

Review of the 1976 Study

Considering the limitations of the data as previously presented, the 1976 data reveals significant information relative to the trucking industry in New Brunswick that had formerly been identified. It is the purpose of this section of the report to review these elements of that study and those facets of the New Brunswick Trucking Industry contained in these data.

Commodities

Six commodity classes were presented in the 1976 data. The trucking activity, by commodity, is summarized in Table 2.2.1 which shows the number of movements by commodity type on an annual basis both intraprovincially and interprovincially. Again caution is warranted when using these numbers, especially the intraprovincial traffic. Due to the relatively few interview stations, most local traffic was, in fact, missed and an emphasis on capturing the relatively long-haul trucking market was the objective of the sampling plan.

Table 2.2.1

1976 NEW BRUNSWICK TRUCKING
COMMODITY SUMMARY

Commodity	Intraprovincial Movements	Interprovincial Movements		
		Originating in N.B.	Destined to N.B.	Total
Unidentified	406 981	49 260	61 194	119 134
Farm Products	11 397	5 418	4 863	10 281
Forest Products	74 564	4 153	6 163	10 316
Sea Products	5 793	2 111	3 808	5 919
Mineral	67 071	4 804	6 216	11 020
Manufactured Goods	279 364	94 192	11 601	205 793
Mixed or Other	66 402	28 525	18 779	47 304
TOTAL	911 456	306 065	219 005	515 070

The data in the table is useful in gaining some insight into the extent of interprovincial trucking in New Brunswick. These data also serve to illustrate the relative importance of trucking to the shipment of the various commodity types. A relatively high proportion (55%) of the traffic was identified as being associated with five major categories while the remainder of the traffic was either unidentified or classed as mixed or other.

The 1979 Origin-Destination Study

The 1979 Origin-Destination Study was a continuation of the work started in 1976 and resulting from an extension of the joint-funding arrangements for highway development between the federal and Atlantic provincial governments. The objective of the 1979 study was to obtain data for estimating the effectiveness of a highway strengthening program. This was to be achieved by providing a data base describing the various characteristics of infrastructure utilization. [1] New Brunswick has the results of this survey tabulated and available for use in furthering an understanding of trucking activity.

The survey was based on a roadside interview technique at 26 locations inside the province of New Brunswick. This is compared to the eight used in the 1976 Study. The expanded survey should provide a more reliable data base to assess the trucking industry, particularly, intraprovincial trucking in New Brunswick. Interviews were conducted at each location for one, 12-hour day in each of two separate study periods. The study periods were: the summer (July and August) and the fall (September and/or October).

The survey was conducted using an interview form as illustrated on Figure 2.2.2. While the survey was expanded to cover all vehicular traffic, the major portion of information was related to trucking. The survey does not have the same limitations as the 1976 study. The true origins and destinations outside of the region were recorded. The Statistics Canada 3 digit Commodity Code and Classification was used (STCC Commodity Groups). In addition, the weights of vehicles were obtained enabling estimates of volumes of goods as well as numbers of vehicles.

A sample comparison of the 1976 and 1979 data is illustrated in Table 2.2.2. These data show the comparison of the projected annual volumes of 1976 and 1979 truck trips.

Table 2.2.2

ANNUAL TRUCK TRAFFIC COMPARISONS OF 1976 AND 1979 SURVEYS

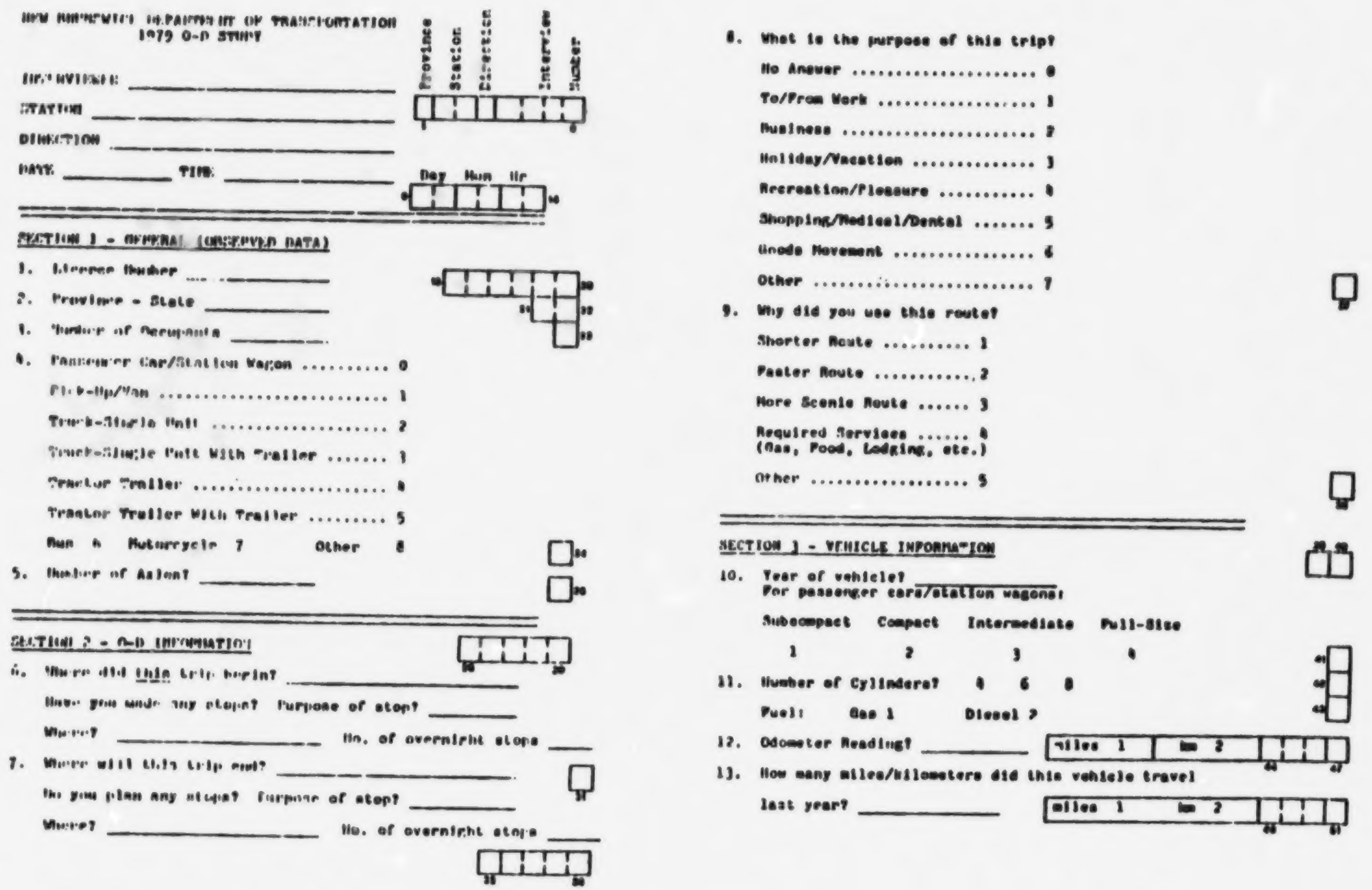
TRAFFIC CATEGORY	NUMBER OF TRIPS	
	1976	1979
Intraprovincial	911 000	2 130 000
Interprovincial		
- originating in N.B.	199 000	269 000
- destined to N.B.	219 000	288 000
- through N.B.	88 000	48 000

Table 2.2.2 indicates an expected significant difference in the volume of intraprovincial truck traffic between the two projections. This simply illustrates the relative number of trips captured in the 1979 survey due to the greater number of survey stations in 1979.

A significant number of relatively short distance local truck trips using the local and collector highways may have been missed in the 1979 study due to the nature of the survey station location. The other differences in these "global" numbers could reflect survey and projection

Figure 2.2.2

1979 ORIGIN-DESTINATION STUDY



NEW BRUNSWICK DEPARTMENT OF TRANSPORTATION
1979 O-D STUDY

INTERVIEWER ____________

STATION ____________

DIRECTION ____________

DATE ________ TIME ________

Province Station Direction Interview Number

Day Mon Hr

SECTION 1 - GENERAL (OBSERVED DATA)

1. License Number ____________
2. Province - State ____________
3. Number of Occupants ________
4. Passenger Car/Station Wagon 0
   Pick-Up/Van 1
   Truck-Single Unit 2
   Truck-Single Unit With Trailer 3
   Tractor Trailer 4
   Tractor Trailer With Trailer 5
   Bus 6 Motorcycle 7 Other 8
5. Number of Axles? ________

SECTION 2 - O-D INFORMATION

6. Where did *this* trip begin? ____________
   Have you made any stops? Purpose of stop? ________
   Where? ____________ No. of overnight stops ____
7. Where will this trip end? ____________
   Do you plan any stops? Purpose of stop? ________
   Where? ____________ No. of overnight stops ____
8. What is the purpose of this trip?
   No Answer 0
   To/From Work 1
   Business 2
   Holiday/Vacation 3
   Recreation/Pleasure 4
   Shopping/Medical/Dental 5
   Goods Movement 6
   Other 7
9. Why did you use this route?
   Shorter Route 1
   Faster Route 2
   More Scenic Route 3
   Required Services 4
   (Gas, Food, Lodging, etc.)
   Other 5

SECTION 3 - VEHICLE INFORMATION

10. Year of vehicle? ____________
    For passenger cars/station wagons:

Subcompact	Compact	Intermediate	Full-Size
1	2	3	4

11. Number of Cylinders? 4 6 8
    Fuel: Gas 1 Diesel 2
12. Odometer Reading? ________ miles 1 km 2
13. How many miles/kilometers did this vehicle travel
    last year? ________ miles 1 km 2

SECTION 4 - COMMERCIAL VEHICLES

14. What is the approximate weight of this unit?

Empty ______	lbs. 1	kg. 2	☐☐☐ ☐
Approximate 1	Weighed 2		☐
Present Weight	lbs. 1	kg. 2	☐☐☐ ☐
Approximate 1	Weighed 2		☐

15. What type of products are on the unit?

______________________________ ☐☐☐

16. How is the vehicle used?

No Answer 0
Private Carrier 1
Public Carrier 2
Government 3
Farm Vehicle 4
Other .... 5 ☐

16. (a) Where did you enter New Brunswick?

______________________________ ☐☐

Where did/will you enter/leave the Atlantic Provinces?

______________________________ ☐☐

SECTION 5 - TOURIST AND/OR OUT-OF-PROVINCE VEHICLES

17. Where did you enter New Brunswick?

______________________________ ☐☐

Where did/will you enter/leave the Atlantic Provinces?

______________________________ ☐☐

18. How long did/will you stay in New Brunswick?

____________________ days. ☐☐

How long did/will you stay in the Atlantic Provinces?

____________________ days. ☐☐

19. What type of accommodations did/will you use?

No Answer 0
Motel/Hotel 1
Relatives/Friends 2
Camping/Tenting 3
Trailer/Recreational Vehicle 4
Cottage 5
Other .... 6 ☐

20. If camping/tenting/trailer, where do you plan to camp tonight?

No Answer 0
Provincial Park 1
National Park 2
Private Campground 3
Friends/Relatives 4
No Plans 5
Other .... 6 ☐

differences in the data. The relatively large difference in the through traffic or traffic simply transiting New Brunswick is likely due to some double counting of the 1976 traffic. In all cases, it is considered that the 1979 survey data is a more reliable picture of truck traffic in the province.

The commodity analysis of the 1979 data is illustrated in Table 2.2.3 where a similar intra/interprovincial mix of traffic is illustrated by commodity. The commodity classes are ranked according to the projected annual trips.

The commodity groupings have been re-grouped from the STCC commodities as defined in Appendix A. Of note here is the improved identification of the commodities. In this survey, 62% of the commodities were identified. The listing of these commodities illustrates the relative importance of trucks to the movement of these specific commodities.

An extension of the origin-destination data is presented in terms of the volumes of each commodity moved by truck in New Brunswick during 1979. Table 2.2.4 illustrates the volume of each commodity moved inter and intraprovincially. It can be seen that, in terms of volume of tonnage of goods, relatively few commodities dominate the trucking activity on New Brunswick highways. Of particular importance are raw wood, petroleum products, metal products and other wood products.

A further analysis of the 1979 Origin-Destination data is presented in Table 2.2.5. In this table, the New Brunswick interprovincial truck traffic is tabulated by volumes of individual commodities. In this table, the volumes of commodity traffic between New Brunswick and other points is presented together with the ratio of goods shipped into New Brunswick to goods shipped out of New Brunswick by truck. This ratio is called "New Brunswick Import-Export Ratio" and is examined for each commodity. A ratio of less than 1.0 would indicate that New Brunswick is a net importer of that commodity.

On Table 2.2.5, the majority of interprovincial truck shipments appears to be centered in Québec and Nova Scotia. It is suspected that this is a function of the terminal locations of many trucking companies. A trucking company may be picking up a trailer in Montréal for delivery to a terminal in Moncton. In fact, if the vehicle trip origin and destination are recorded by the true origin and destination of the shipment (i.e., the trailer), the data might be completely different. It should be remembered that this fact could cause a general understatement of long-haul trucking.

These origin-destination studies are a means of identifying certain elements and patterns associated with the trucking industry. However, due to the utilization of a very small sample as compared to the population, one should exercise caution in the use of the data. The preceding tables attempt to identify some patterns. It is also considered that these data are better able to identify truck trips than the journey of a commodity.

The foregoing analysis seems to illustrate that the best data available at present to describe the trucking industry in New Brunswick has significant limitations. The surveys to date describe the movement of

Table 2.2.3

INTER/INTRAPROVINCIAL COMMODITY FLOW ANALYSIS

Commodity	Projected 1979 Truck Trips	Intraprovincial (%)	Interprovincial Originating in N.B. (%)	Interprovincial Destined to N.B. (%)	Interprovincial Through N.B. (%)
Unidentified	1 047 489	81.9	9.4	8.4	1.0
Crude Non-metal	228 075	93.3	2.9	1.5	2.1
Crude Wood	204 511	82.0	10.0	5.8	2.2
Petroleum Products	203 787	90.9	4.9	3.8	0.4
Wood Products	162 576	56.8	7.4	34.0	1.7
Manufactured Goods	149 949	64.9	10.9	19.3	5.0
Foodstuffs	123 066	64.4	11.5	19.5	4.6
Metal Products	121 192	64.9	12.3	18.3	4.4
Beverages	55 785	84.0	5.9	9.7	0.4
Dairy Products	41 861	92.0	4.4	2.7	0.7
Paper	37 736	71.3	24.5	3.6	0.5
Feed	36 239	68.0	22.4	8.2	1.4
Grains	36 096	75.0	23.0	1.5	0.5
Fish	28 887	33.9	27.0	30.7	5.8
Chemicals	27 721	63.7	15.8	14.7	5.4
Meat	24 719	64.2	8.2	20.7	6.5
Vegetables	17 126	56.4	21.5	12.7	9.4
TOTAL	2 735 168	77.9	9.8	10.5	2.0

Table 2.2.4

VOLUMES OF GOODS SHIPPED BY TRUCK IN NEW BRUNSWICK
(1 000 tons)

Commodity	Total Volume	Intraprovincial	Interprovincial		
			Originating in N.B.	Destined to N.B.	Through N.B.
Unidentified	3 316	1 768	925	501	122
Crude Wood	3 930	3 329	426	71	94
Petroleum Products	2 346	1 911	194	224	17
Metal Products	2 077	1 358	371	279	69
Wood Products	1 973	1 316	279	323	55
Crude Non-metal	1 576	1 375	106	73	22
Machinery & Manuf.	1 320	755	207	215	93
Foodstuffs	1 145	658	75	368	44
Paper	718	631	56	26	5
Beverages	523	467	38	22	5
Dairy	304	252	33	12	7
Fish	290	57	152	54	27
Chemicals	283	128	51	62	42
Meat	251	66	19	135	31
Grains	206	86	104	12	4
Feed	202	67	100	25	10
Vegetables	117	67	37	6	7

Table 2.2.5

NEW BRUNSWICK INTERPROVINCIAL TRUCK TRAFFIC
(1 000 tons moved by truck)

Commodity	Tons of Goods Shipped	N.S.	P.E.I.	Nfld.	Québec	Ontario	West	U.S.A.	N.B. Import/Export Ratio
Metal Products	650	424	64	0	102	18	1	81	0.69
Wood Products	602	231	19	0	92	41	0	250	1.19
Crude Wood	507	64	6	0	134	0	16	350	0.16
Machinery & Manufac.	472	252	53	0	63	33	0	0	1.37
Foodstuffs	443	260	72	0	53	31	0	45	4.90
Petroleum Products	418	367	12	0	39	0	0	3	1.13
Fish	206	129	8	-	42	0	0	26	0.34
Crude Non-metal	180	29	64	0	74	0	0	18	0.67
Meat	149	10	11	-	126	2	0	0	7.05
Feed	125	67	8	0	11	3	0	34	0.26
Grains	116	111	3	0	0	0	0	0	0.12
Chemicals	113	35	4	0	62	0	0	0	1.22
Paper	82	68	0	0	3	6	0	6	0.48
Beverages	60	20	22	0	10	5	0	0	0.30
Dairy	45	4	3	0	39	0	0	1	0.34
Vegetables	43	2	1	0	31	9	3	0	0.16
Unidentified	1 426	634	73	0	404	243	0	60	0.54

trucks but not the movement of the trailer. The information on commodities is limited with a large proportion not identified. It is concluded that both of the O-D surveys accomplished their stated objectives. However, they are of limited value for other purposes. Certainly, a waybill sampling plan would be preferable for an ongoing picture of goods movement.

The question may become one of who is to collect these data. The Provincial Department of Transportation has good research potential but limited resources to establish an ongoing truck cargo analysis. The New Brunswick Motor Carrier Board does not at present have any research capability.

2.3 Growth of Trucking in New Brunswick

Concurrent to the rapid expansion of the highway system in the past half century, trucking has become a major mode of goods shipment in North America. Although trucking had been growing in the 1920's and 1930's, it was not until the end of World War II that the trucking industry started its rapid expansion. Prior to this time, trucking was almost exclusively intra-city and local in nature. These local cartage operations grew rapidly into a role in freight transportation that is national and continental in nature. The general growth in trucking is reflected in the statistics contained on National Vehicle registrations in Canada for the period from 1938-1958. As stated by Steeves in a 1969 Report on Trucking in Canada: [2]

> "Trucking serves most modern economies in a way that is, in many respects, quite different from other forms of freight transportation. The outstanding feature of the truck is convenience, the same sort of convenience that led to the development of the passenger car as the dominant form of personal transportation."

In this work by Steeves, the general growth in trucking was examined and a report published by the CTC in 1975 on the Canadian Trucking Industry [3] further extended this work. In a 1962 publication, [1] a growth of 460% in trucking registrations was observed during that 20 year period or an annual growth rate of 5%. Later work by Steeves [2] published in 1969 examined the decade from 1957 to 1967 and recorded a 32% increase in that decade in new truck registrations. This again indicates that a slower annual rate of growth of 2.8% was observed in the 1960's.

For similar information regarding New Brunswick, the Department of Transportation records were examined to illustrate the growth in trucking over the period 1969 to 1980. The results of this investigation are contained in Table 2.3.1 and illustrated in Figure 2.3.1. These figures show the total number of trucks registered in the province for the years 1969 to 1980, inclusive. These data, therefore, include all trucks including the many light trucks and vans that have grown popular during recent years. An estimate of trucks with a gross vehicle weight (GVW) over 10 000 lbs. is included. This estimate was developed on the ratio of new vehicle registrations from the 1976 CTC study [4] and with data for 1980 from the New Brunswick Department of Transportation. [5] In terms of truck

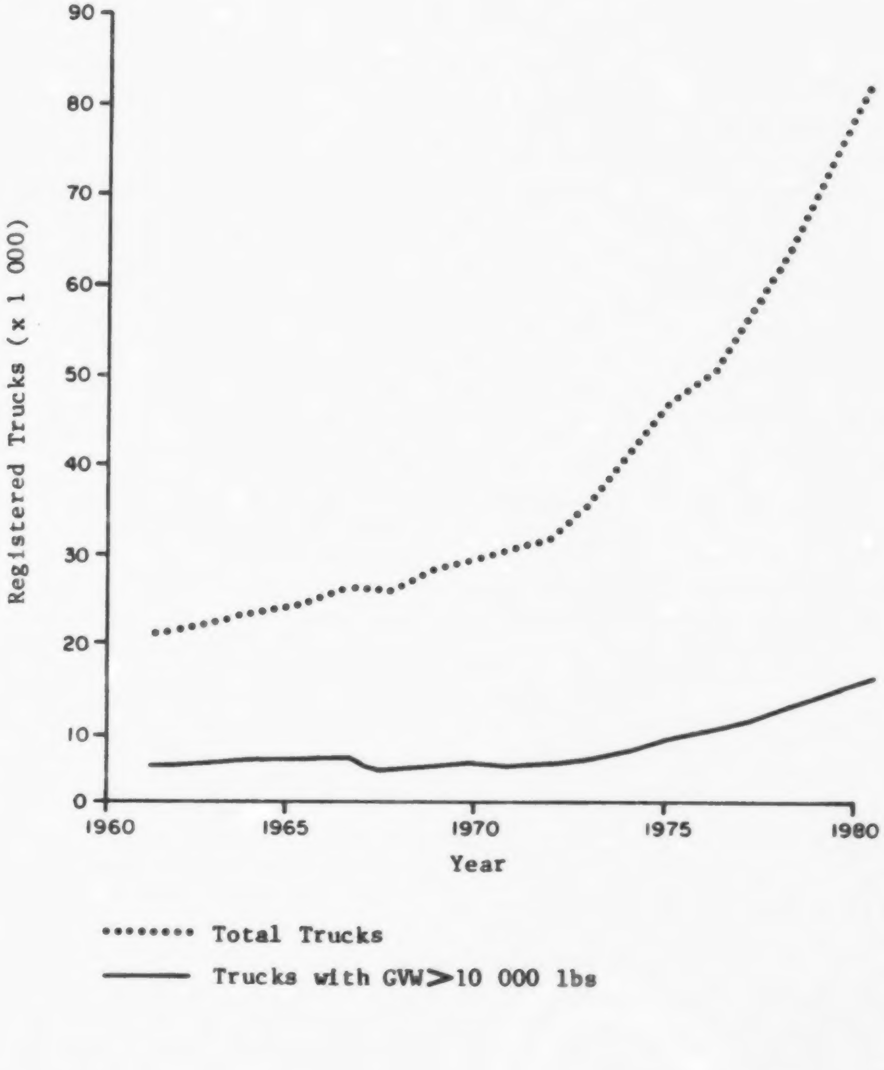
Table 2.3.1

NEW BRUNSWICK TRUCK REGISTRATIONS

Year	Trucks Registered (Total)	GVW Greater Than 10 000 lbs.
1960	22 467	6 630
1961	22 163	6 540
1962	20 987	6 190
1963	21 318	6 290
1964	22 559	6 700
1965	23 341	6 560
1966	24 125	6 880
1967	25 794	6 940
1968	25 206	5 450
1969	27 968	5 900
1970	28 520	6 217
1971	29 852	5 850
1972	31 284	6 260
1973	34 815	6 960
1974	40 578	8 116
1975	47 175	9 540
1976	50 360	10 070
1977	57 281	11 460
1978	65 037	13 000
1979	73 726	14 750
1980	81 862	16 000

Figure 2.3.1

PLOT OF TRUCK REGISTRATIONS IN NEW BRUNSWICK



registrations, very little increase was recorded in New Brunswick during the 1960's and a rather substantial increase (10% annually) during the 1970's. This growth rate refers to trucks with a GVW greater than 10 000 lbs.

Another indicator of the activity of trucking in New Brunswick was considered to be the growth in diesel fuel sales. Statistics Canada data were reviewed (Publication 53-218) for the period 1959 to 1979. The results of these statistics are shown in Figure 2.3.2. It can be seen from this diagram that, in fact, the growth in diesel fuel sales in New Brunswick has roughly paralleled the growth in diesel fuel sales in Canada during the past 20 years. It is interesting that the amount of growth prior to 1970 was slightly lower in New Brunswick than the nation as a whole. Since 1969, the growth has been substantial. A further comparison of the growth in New Brunswick diesel sales to Canadian sales is shown in Table 2.3.2.

Table 2.3.2

DIESEL FUEL STATISTICAL COMPARISON

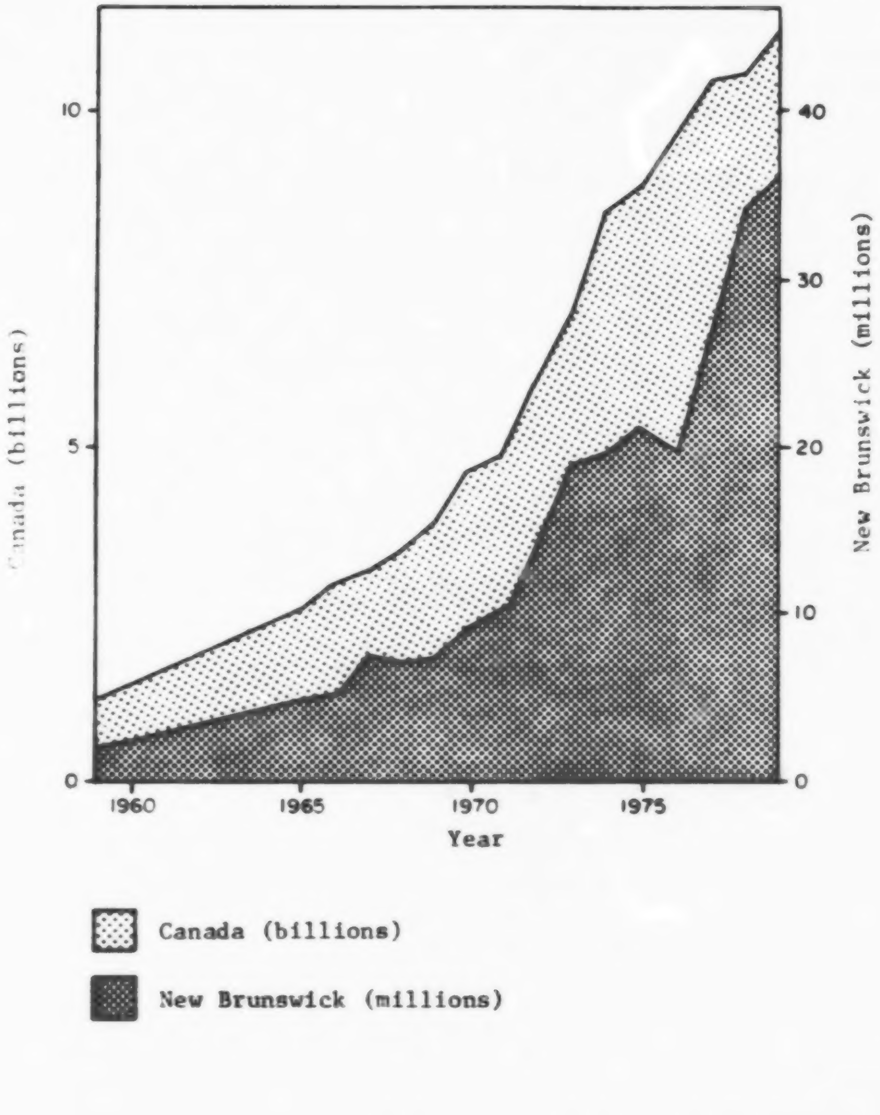
	1959	1969	% inc	1979	% inc
New Brunswick (million gallons)	2.01	7.71	(283%)	37.0	(380%)
Canada (million gallons)	120	388	(223%)	1138	(193%)
New Brunswick Share of National	1.7%	1.8%	--	3.16%	--

It is uncertain why the irregularities exist in New Brunswick's diesel fuel usage especially in the 1975 period. It may have been due to a lapse in activity, price changes, or statistical inaccuracies. However, it is of considerable importance that the ten year growth rate of trucking, as indicated by fuel sales, increased in New Brunswick in the 1970's while it declined for Canada as a whole. As well, the figures indicate that New Brunswick's share of Canada's diesel fuel sales doubled during the 1970's.

From these two sources of data, the New Brunswick motor vehicle registrations and the Statistics Canada diesel fuel sales data, the general growth in trucking in New Brunswick can be identified. Growth in trucking in the 1960's was restrained when compared to the rest of Canada. In the 1970's, trucking growth exceeded the national rate of growth and developed as a full competitor in the shipment of goods in New Brunswick. The reasons for this are many and will be the subject of discussion throughout the remainder of the report.

Figure 2.3.2

HISTORICAL GRAPH OF DIESEL FUEL SALES FOR ROAD USE



Source: Statistics Canada, Publication 53-218.

2.4 Trucking and the New Brunswick Forest Products Industry

It is evident from the previous commodity analysis that the transportation generated by the forest products industry is a major component of the New Brunswick trucking industry. In fact, a strong dependance on trucking has been developed by the forest-related industry in recent years. The purpose of this discussion is to provide the reader with a brief overview of this substantial proportion of New Brunswick's domiciled trucking industry.

Forestry-related activities are an important component of New Brunswick's economy. Some 13 000 people are employed directly in wood harvesting and forest product manufacturing. The major component of this industry involves some 150 sawmills producing approximately 500 million board feet of lumber annually and ten pulp and paper mills producing two million tons each year.

This production requires a major movement of wood and wood products which, in turn, generates a high demand for transportation services. The following discussion of this transportation problem is divided into two main components; the movement of raw wood to the mill and the movement of products from the mill to the market.

Figure 2.4.1 is used to illustrate the major interprovincial shipment of wood to and from the mills and forests of New Brunswick. It is evident that this wood movement is comprised of both roundwood and "chips" used in the production of pulp and paper. The movement of wood chips has become a major concern of the forestry industry. Chips are developed primarily as a by-product of the sawmill industry and are supplied to the pulp and paper industry, allowing for the more complete use of the wood resource for production.

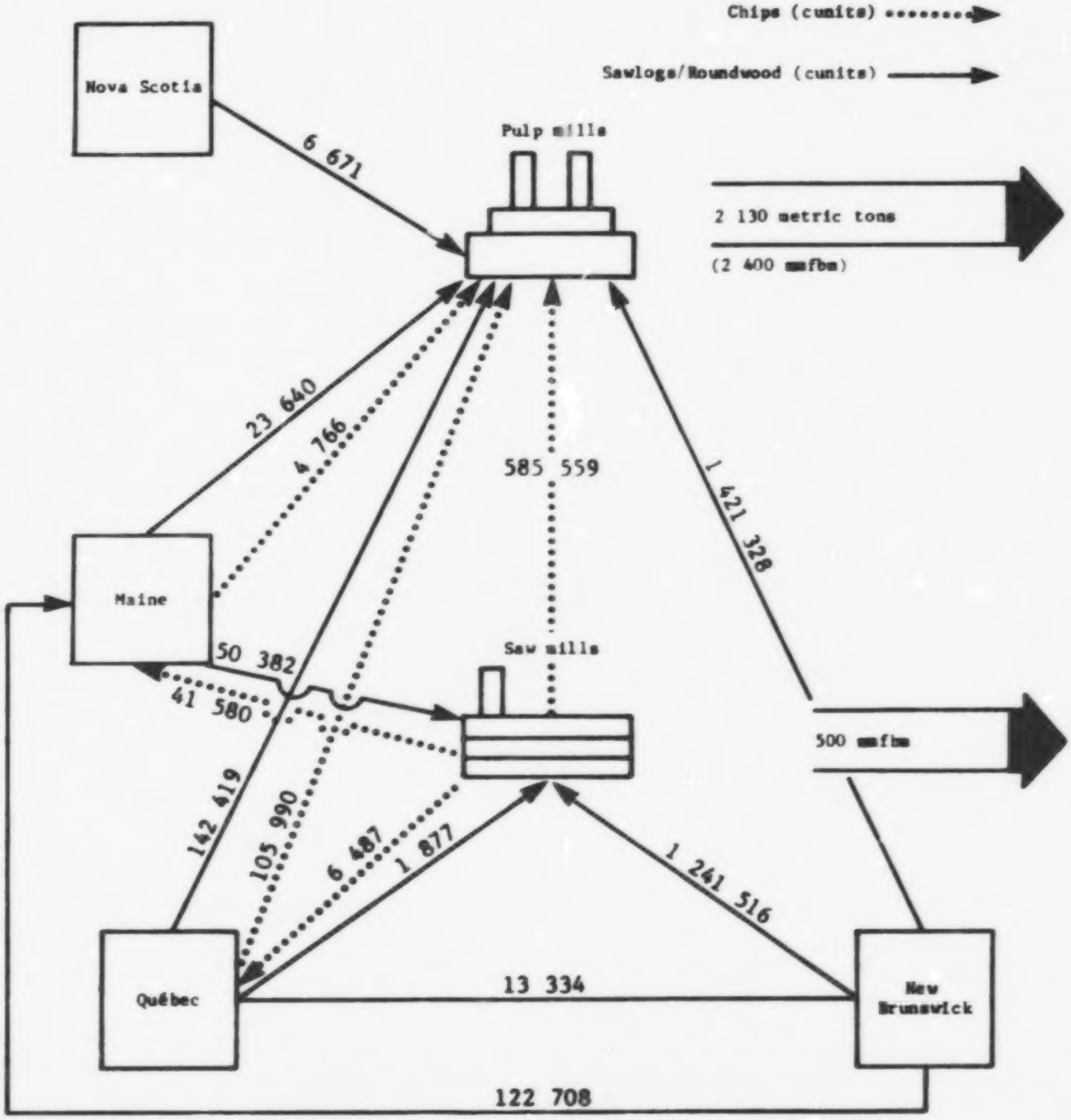
The movement of the massive quantities of roundwood and chips, as illustrated in Figure 2.4.1, generates a high demand for transportation. In the early days of lumbering in New Brunswick, the movement of wood to the mills was accomplished by river driving. However, this practice has been completely eliminated as a result of the general growth of trucking in the post World War II era and strict environmental standards for the waterways. Trucking enables a wider extraction potential of the timber resource as well as providing a more manageable inventory control system for the industry in general. Trucking has, thus, become the virtually exclusive means of extracting raw wood from the forests.

Wood chip movement, on the other hand, is handled in a variety of ways. Wood chips are produced at sawmills and shipped on to the pulp and paper mills. Most major sawmills in the province are located on rail lines and it is estimated that half of the transportation of wood chip is accomplished through the rail mode.

In recent years, with the growth in energy costs, there has been a growing use of barges for the shipment of both roundwood and chips. This is still of relatively limited proportion, however, and has been confined to movements down the Saint John River to the Irving Mill in Saint John.

Figure 2.4.1

FLOWCHART OF WOOD AND FOREST PRODUCTS MOVEMENTS IN N.B., 1980
(cunits)


Chips (cunits)
Sawlogs/Roundwood (cunits)
Nova Scotia
Pulp mills
6 671
2 130 metric tons
(2 400 mmfbm)
23 640
4 766
585 559
1 421 328
Maine
Saw mills
50 382
41 580
500 mmfbm
142 419
105 990
6 487
1 877
1 241 516
Québec
13 334
New Brunswick
122 708

The data in Figure 2.4.1 illustrate that 2.86 million cunits of roundwood and 756 thousand cunits of chips are transported in New Brunswick each year.

It should be mentioned that the exact identification of the origins and destinations of wood would be a complex task. This complexity is due to the dynamic nature of the industry and its sensitivity to a number of commercial, regulatory, and economic variables as well as the individual production capabilities associated with each mill in the system.

The 1976 Origin-Destination Study revealed that 39.6% of the trucks involved in the movement of raw forest products were straight trucks. Virtually all of these were three-axle trucks. The same survey indicated that 59.6% were tractor semi-trailer units. The remainder (0.8%) were other combinations. Another study published in 1979 entitled "The Transportation of Wood in Northeast New Brunswick" was developed jointly by the New Brunswick Forest Authority and the Federal Department of Regional Economic Expansion. In this study, a small sample (147 trips) revealed a similar general relationship between the proportion of tractor semi-trailer units and straight trucks. This study recorded the payloads of the various units used in this shipment. These are shown in Table 2.4.1.

Table 2.4.1

PAYLOAD OF RAW WOOD IN CUNITS

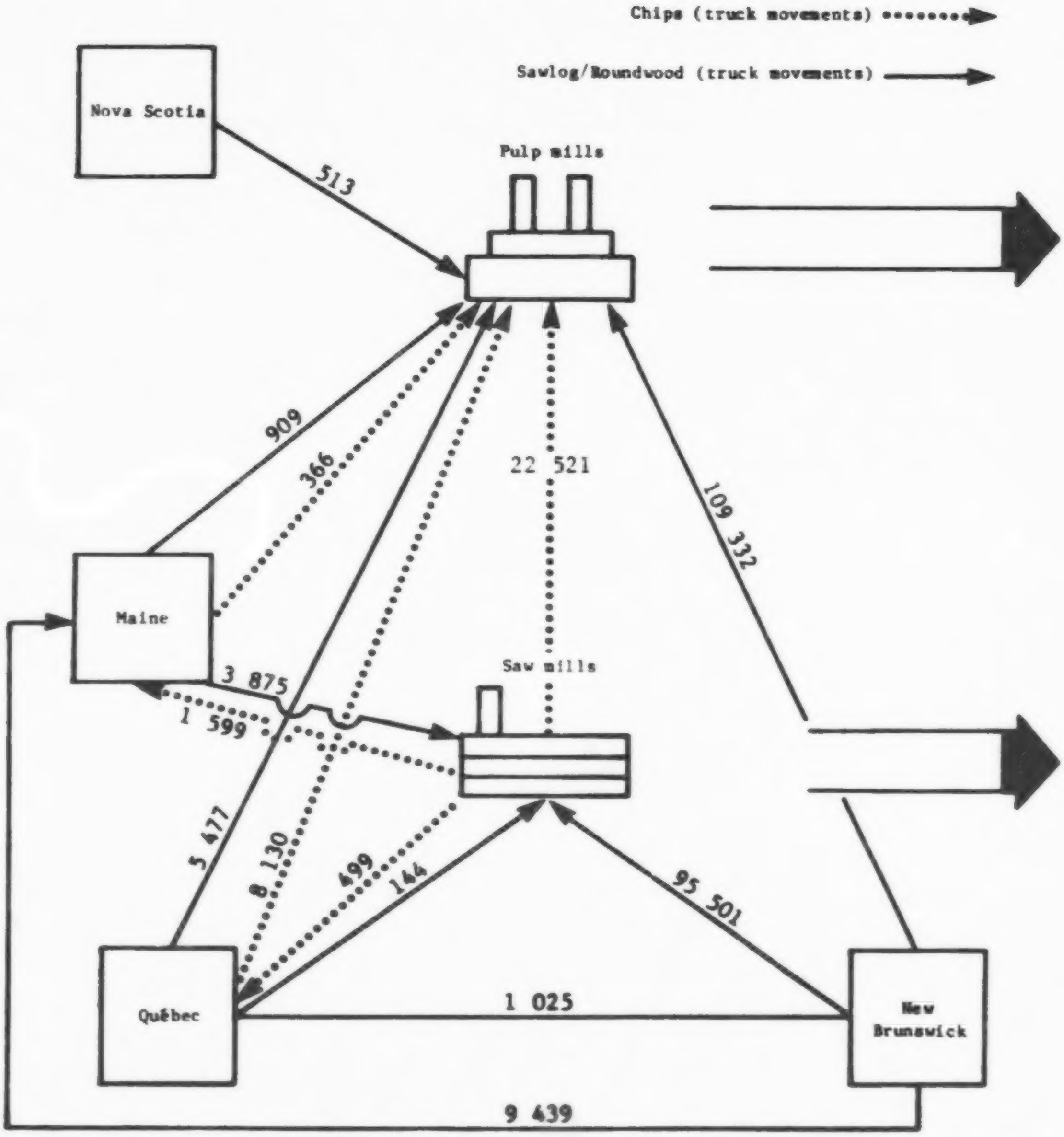
Wood Form	Straight Truck (Tandem Rearaxle)	Tractor Semi-Trailer	Trailer Train
8' Softwood	7.81	16.30	18.34
8' Hardwood	5.93	9.76	-
Tree Length Softwood	9.78	11.28	-

From these data an average payload per truck of 13 cunits can be calculated and using the overall proportions of wood movement to the mills by truck (100% of roundwood, 50% of chips) in cunits, the wood movements in Figure 2.4.1 have been transformed to truck movements in Figure 2.4.2. This represents an overall total of 260 000 truck loads of roundwood and chips on New Brunswick's highways. The number of truck movements would be twice this, logically assuming an empty backhaul.

It should be noted that this overall estimate is substantially higher than either the 1976 or the 1979 origin-destination studies would indicate. This is not surprising since the O-D study did not concentrate on local road activity where, in fact, many of these movements take place.

Figure 2.4.2

FLOWCHART OF WOOD AND FOREST PRODUCTS MOVEMENTS IN N.B., 1980
(trucks)


Chips (truck movements)
Sawlog/Roundwood (truck movements)
Nova Scotia
513
Pulp mills
909
366
22 521
109 332
Maine
Saw mills
3 875
1 599
5 477
8 130
499
144
95 501
Québec
1 025
New Brunswick
9 439

The nature of the trip from the harvest site to the mill is difficult to define because of the absence of data. While the trucking of saw logs and roundwood are evident on New Brunswick's major highways, there is a considerable amount of this activity on the local highway network and a significant amount of trucking occurs on private roads developed and maintained by the industry.

The Northeast New Brunswick study recorded the journey of its sample of 147 trips. The trip as recorded typically started by proceeding from the harvest site, a short distance (less than two miles) to an extraction road. The remainder of the trip was almost equally travelled on gravel-surfaced and asphalt-surfaced roads. It is expected that most of the unsurfaced roadway was, in fact, privately developed roads. The journey ended at the mill. The trip distances ranged from 30 miles to 90 miles with the average in the order of 60 miles.

Another study completed in 1979 by A.D.I. Limited for Transport Canada also dealt with the transportation of forest products. This study entitled "The Transportation of Raw Forest Products by Highway in New Brunswick" examined the movement of raw wood on several routes in New Brunswick. In this report, the trips that were examined had a one way distance ranging from 45 to 230 miles with an average of 115 miles. Such long hauls are not uncommon especially to the larger mills in the Saint John area.

The reasons for the use of trucks for movements of wood over long distances are many. Certainly the convenience of trucking is important. Direct access to remote timber stands by the truck is a necessary element in a modern logging operation. Transportation by rail would often involve a substantial road-haul to a siding and an extra unloading/loading operation.

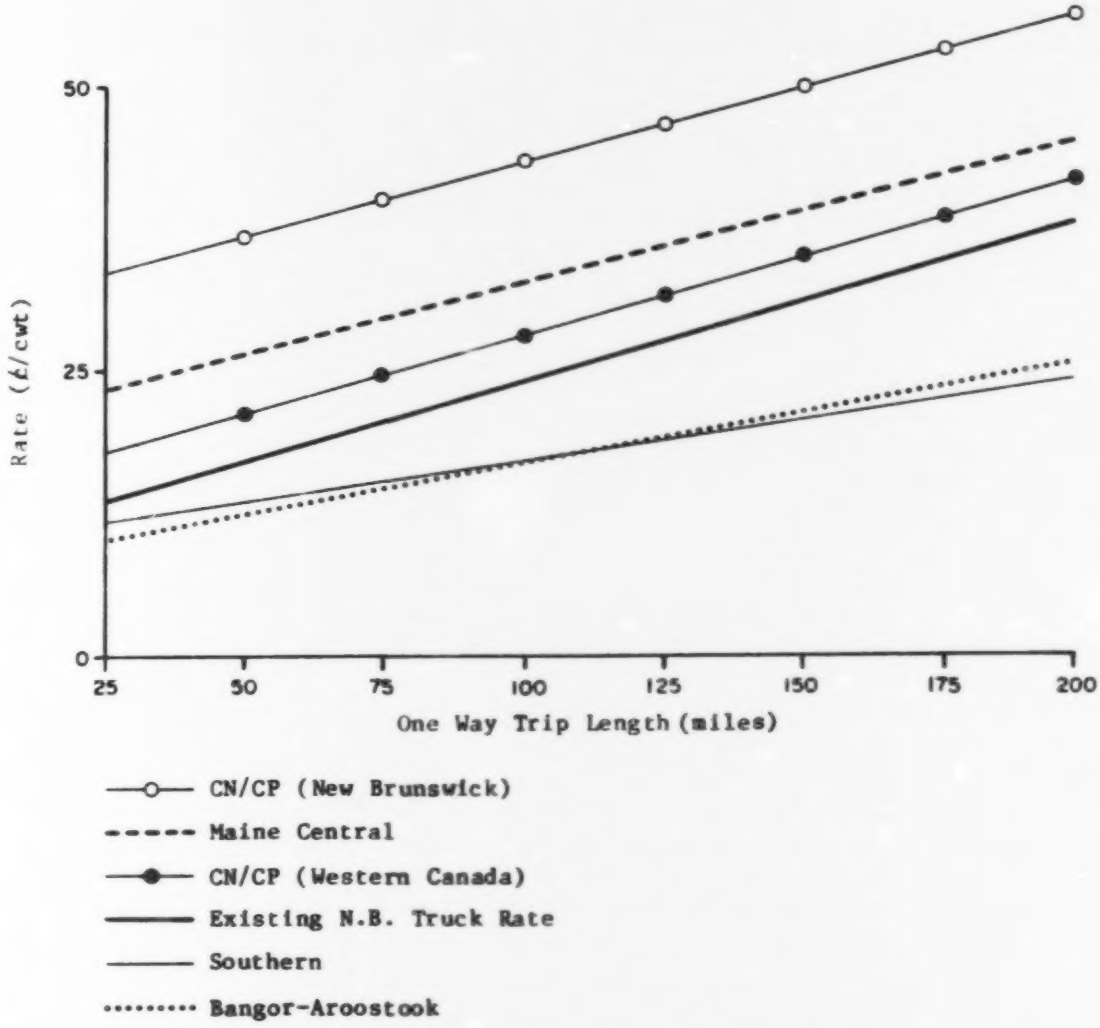
A 1978 comparison of trucking and rail transportation rates in the movement of roundwood in New Brunswick is contained in an unpublished report by D.F. Darrow. The results of this study are contained in Figure 2.4.3. In this diagram the 1978 truck rates were compared to the rail rates for roundwood movements over different stage lengths. Also shown on this diagram is a line that represents truck costs based on a cost model that was developed for Transport Canada by Trimac Consulting Services. The line shown is for a five-axle tractor semi-trailer unit. The cost data has been adjusted to represent 1977 data. The truck and rail rate lines were developed on a regression analysis of existing rates. This diagram illustrates a number of important facts. First of all, the trucking rates are significantly lower than the rail rates for all trip lengths and as the lines are essentially parallel, there is no distance at which rail becomes economic.

Secondly, and perhaps more important is the substantial difference between the 1977 truck costs and rate structure. In fact, the greater the length of haul, the greater is the loss associated with the movement.

These low trucking rates are indeed difficult to understand. The implication of these curves indicate that the operator hauling on trip lengths over 50 miles in this industry is not, in fact, getting a return on his investment. In his paper, Darrow postulated a number of reasons for

Figure 2.4.3

COMPARISON OF TRUCKING AND RAIL TRANSPORTATION RATES IN THE MOVEMENT OF ROUNDWOOD IN NEW BRUNSWICK



Source: Roundwood Transport Rate/Cost Analysis, D.F. Darrow.

this. First of all, he stated that, in fact, the operators were not receiving a good return on their investment and are not particularly knowledgeable about accounting principles involved in assessing their operating costs. This fact has also been documented in the study by the UNB Transportation Group called "The Impact of Trucking on the Forest Industry". Secondly, the fact became apparent that active competition among truck operators manages to keep rates low.

The 1979 report by A.D.I. stated that "it is generally agreed by those directly involved in the forest products industry, that, independent truck operators represent the minimum cost to the shipper alternative with respect to the transportation of raw wood fibre products". The most significant reasons for this statement were listed and summarized as follows:

1. Independent truck operators will accept a lower rate of return to stay in business.
2. Maintenance costs and administrative overhead tend to be minimized due to the owner/operator driver being one person.
3. The owner operators work well in excess of a standard 40-hour week and will maximize their productivity.

It is evident from the above numbers that the mainstay of the forest products trucking industry is, in fact, in private hands. While the figures in Table 2.4.2 indicate that 80% of the trucking is, in fact, private and the remainder public, it gives very little information about the ownership of the industry. A brokerage firm can, of course, be a private trucker or it could maintain a public carrier license.

Some attempt has been made in recent years by various companies and individuals to provide new direction to this part of the transportation industry. One company has its own fleet, another has a few trucks in a fleet and depends mainly on local, independent truckers. Some companies prefer to deal with one trucking firm who in turn hires the brokers. Whether the firm is a private or a public carrier depends on the operational flexibility desired by the trucking company.

It is evident that the raw forest products trucking industry appears to be "a cottage industry" in New Brunswick. One pulp and paper mill that depends largely on independent truckers has a listing of over 600 truckers who consider themselves available for business. This company rarely advertises or calls people yet, if the wood inventory drops, there are always trucks available.

Even the mill is not in control of transportation or fully knowledgeable. Often there is a delivered price for wood which puts the responsibility of the transportation of the product on the individual or contractor who harvests the wood.

The development of independent truckers associations and private woodlot owners associations or syndicates has occured in many parts of the province over the past several years. These organizations tend to act much like a union in dealing with the larger companies in negotiating rates,

Table 2.4.2

PERCENTAGE OF PUBLIC AND PRIVATE CARRIERS HAULING RAW FOREST PRODUCTS

Station	Route	No Answer	Private	Public Carrier	Other
Longs Creek	2	-	67%	33%	-
Coles Island	2	-	37%	62%	-
Westfield	7	-	80%	20%	-
St. Stephen	1	-	90%	7%	3%
Belledune	11	2	84%	14%	-
Allardville	8	5	86%	8%	-
Renous	8	20	68%	10%	-
Nelson	126	3	74%	23%	-
Campbellton	17	11	87%	-	-
Plaster Rock	109	13	83%	4%	-
St. Basile	2	2	85%	14%	-
St. Quentin	17	2	69%	27%	-
Overall N.B.	-	4	81%	13%	-

Note:

Essentially three types of ownership are possible:

(1) private ownership by an independent trucker;

(2) private ownership by a forest resources company; and

(3) brokerage relationship wherein the private individual owns the truck and the brokerage firm owns the trailers and administers the unit.

quotas etc. The effects of these organizations on trucking do not appear to be overwhelming at this point in time but may be an influential force in the immediate future.

NOTES

[1] D.W. Car. Truck Rail Competition in Canada. 1962 Royal Commission on Transportation in Canada.

[2] E.T. Steeves. Trucking in Canada 1957-1967. 1969 meeting of the Canadian Trucking Association.

[3] Canadian Transport Commission. The Canadian Trucking Industry, Issues Arising out of Current Information, Research Report No. 75-06E, 1975 (Out of Print).

[4] Ibid.

[5] Conversation with D. Seeley. Feb. 18, 1980, Deputy Registrar, New Brunswick Department of Transport.

Chapter 3

THE ECONOMIC STRUCTURE OF THE INDUSTRY

An integral part of an examination of the impact of economic regulation on the trucking industry in the province of New Brunswick is an assessment of the economic structure of the industry. This study addresses that problem through an analysis of the cost structure of the industry; the degree of concentration and its trend over time; the nature of the capital structure of the industry - in particular, the question of equipment owned and operated; and, the role of the broker operator in the industry domiciled in the province.

The nature of the industry will be considered both in isolation from the industry operating in Canada, and in comparison with the latter. It is for this reason that considerable attention is paid to the cost structure of the New Brunswick domiciled segment of the industry. Before it is possible to draw comparisons with the industry elsewhere, the basis of such comparisons must be laid. As a result, considerable effort is expended in an attempt to determine where the provincial industry differs from that nationally. An effort is made to explain these differences.

A major portion of the data employed in this chapter has been drawn from two Statistics Canada publications. The financial and operating information has been drawn almost entirely from "Motor Carriers - Freight and Household Goods Movers.". This has been supplemented by information contained in the "For-Hire Trucking Survey". In both cases, attention was focused on the years 1975 and 1978. Other information has been utilized. Data have been extracted from the "Atlantic Provinces Transportation Directory", 1979, published by the Atlantic Provinces Transportation Commission. This was supplemented by information provided by officials of the province of New Brunswick relating to carrier and vehicle licensing. Where additional information is utilized, sources are listed in the text.

3.1 Definition of the Industry

Statistics Canada defines the industry as consisting of those carriers with gross annual operating revenues greater than $100 000. A time lag of one year is incorporated into the data. In other words, the 1978 industry is defined as consisting of those carriers which had a gross annual operating revenue greater than the lower limit in 1977. Those above the cut-off point are then divided into three classes - this being the conventional classification used in the jurisdictions. Class III carriers have revenues larger than the lower boundary, but less than one-half million dollars. Class II carriers have revenues between 0.5 and 2.0 million dollars. Class I carriers have annual operating revenues of $2.0 million or more.

While this definition of the industrial structure is, as noted, the conventional one, it does create problems for the present study. In the first place, carriers move from class to class between years. This movement makes it difficult to assess what has happened to a particular class over time. More serious, from the point of view of the present study, is the question of carriers excluded from the survey because of their small revenues. Some indication of the significance of this exclusion can be gained from the subsidy payments made under the Atlantic Region Freight Assistance Act. Information provided by the Canadian Transport Commission states that, for the country as a whole, subsidy payments received by the carriers in the Statistics Canada survey amounted to some $18.3 million of ARFAA assistance during 1978. However, in the fiscal year 1977-78, total ARFAA payments were $28.4 million. In the fiscal year 1978-79, the total ARFAA payments in the category were $38.4 million. A weighted average of these two figures suggests a total of subsidy payments in the order of $34.5 million for the year 1978. Thus, only 53% of the total subsidy payments were accounted for by carriers included in the Motor Carriers Freight survey. There are two exclusions from the survey which would explain part of this discrepancy. The first of these is the subsidization of the movement of used household goods. In 1977, the westbound financial assistance provided for this movement by truck amounted to approximately $839 000. Neither westbound data for 1978 nor any intra-regional data are available, but it seems doubtful that this particular commodity group could account for a significant part of the missing subsidy dollars. The second possible omission is that related to very small carriers - those whose total revenues were so small in 1978 as to exclude them from the survey universe. To use this justification, however, is to suggest that in the aggregate, they have such revenues as to almost equal the revenues of the carriers included in subsidy payments from the intra-regional and westbound subsidy programs.

In an attempt to resolve this difficulty, it is necessary to consider the industry as surveyed by Statistics Canada. The 1978 "Motor Carriers - Freight and Household Goods Movers" reports that there were 241 carriers of freight in operation in the province of New Brunswick in that year. Of these, 89 were domiciled. Information obtained from the "Atlantic Provinces Transportation Directory", 1979, suggests that as of January 1, 1979, there were 55 motor carriers licensed as general freight carriers domiciled in that province. At the same time, the same source suggests that there were 100 contract carrier licenses held by persons or firms domiciled in the province of New Brunswick. There are some duplications between the two lists. In other words, it is possible to hold both a common carrier license and a contract license and a number of firms do this. The lists have not been adjusted to exclude duplication. If this duplication was accounted for, the total number of licensed carriers domiciled in the province of New Brunswick appears to be in the range of 130 - 140. Allowing for the small scale of operation of many of the general freight carriers, (based on the equipment operated by them - the data contained in the APTC publication), the number of carriers included in the sample - that is 89 - appears to be reasonable if only the licensed for-hire motor carriers are being considered.

These numbers, however, strongly suggest that it is only the licensed carriers which are surveyed by Statistics Canada. If this is the case then, automatically, all carriers of exempt commodities would be excluded. It appears that this is a major cause of the discrepancy between the subsidy payments made and those received by the carriers in the survey. This question can be pursued one step further.

A second Statistics Canada publication was used in the analysis - the "For-Hire Trucking Study". The 1977 edition of this publication reports that total tonnages of pulpwood carried in Canada in 1977 were 1.242 million tons. A single 400 ton per day mill would require a larger annual volume of pulpwood than the total flow reported. Even taking into account the private trucking of pulpwood and the carriage of pulpwood chips to the pulp and paper industry, there appears to be difficulties with the data as reported.

As a result, it must be recognized that available Statistics Canada data deal with only a limited portion of the trucking activity in Canada. Private carriers are excluded. This, coupled with the small carrier exclusion and others noted in the Statistics Canada publications on trucking, result in only a portion of the industry being described in the following analysis. Therefore, great care must be taken in interpreting the results of that analysis. It does not necessarily reflect what is happening in the larger trucking picture, and may not, in fact, be even representative of it. Attempts will be made, where data are available, to supplement the published information. The compatibility of these other data will be discussed when presented.

3.2 Operating Revenues and Expenses

With these limitations of the data in mind, attention is directed to the operational side of the motor carrier freight industry over the period 1975 to 1978. The objective of the analysis is to define the nature of the part of the industry included in the Statistics Canada survey, and to draw comparisons between that, and the industry at the national level. The information in this chapter is also important in providing operational and financial background to be employed later in the study to assess the regulatory framework within which the industry operates.

Detailed operating data on both the cost and revenue side for the New Brunswick industry in 1975 are shown in Table 3.1. The data indicates that the industry in New Brunswick was comprised of 73 carriers. Of these, almost two-thirds fell into the Class III category. Only four firms, approximately 5%, were included in the Class I group. These data indicate that there exists a significant degree of concentration in the industry with the Class I firms accounting for half the operating revenues. The majority of the revenues were earned in the movement of freight - there being little in the way of ancilliary revenues.

Even a cursory examination of the cost side of the industry in 1975 reveals that there are significant differences among the three classes of carrier. Perhaps the most significant of these differences is the involvement of the broker operators in the trucking industry in New Brunswick. In the case of the Class I carriers, payments to broker

Table 3.1

MOTOR CARRIERS FREIGHT: OPERATING REVENUES AND EXPENSES,
NEW BRUNSWICK - 1975
(millions of dollars or percentage)

	Class I		Class II		Class III		All Classes	
Number of Firms	4		18		51		73	
Item	($)	(%)	($)	(%)	($)	(%)	($)	(%)
Operating Revenue								
Freight	30.0		20.3		-		-	
Other	2.5		1.7		-		-	
Total	32.5		22.0		10.6		65.1	
Operating Expenses								
Transportation								
Salaries	2.3	7.5	4.0	19.7	3.8	37.3	10.1	16.4
Fuel incl. taxes	0.8	2.8	2.2	10.5	1.4	13.6	4.4	7.2
Payment to Brokers	12.5	40.8	4.9	23.2	0.9	8.6	18.3	29.5
Total	21.7	70.6	14.8	70.2	6.5	64.0	42.9	69.4
Maintenance	2.7	8.7	2.5	11.8	1.5	14.6	6.6	10.7
Terminal Expenses	1.9	6.4	1.0	5.0	0.1	1.4	3.1	5.0
Traffic/Sales Exp.	0.3	1.0	0.2	1.0	-	-	-	-
Insurance/Claims	1.3	4.1	0.7	3.1	-	-	-	-
Admin./General	2.9	9.4	1.9	8.8	2.0	20.1	9.2	14.9
Total Op. Expenses	30.7	-	21.0	-	10.2	-	61.9	-
Operating Ratio	0.945		0.956		0.963		0.952	

Source: Statistics Canada, Motor Carriers - Freight and Household Goods Movers, 1975.

operators accounted for 40.8% of the total operating costs. In the case of Class II carriers, these payments amounted to 23.2% of the total operating costs and the figure for Class III carriers was 8.6%. For the industry, the average was 29.5% indicating that the use of the industry is to concomitantly reduce other operational costs - to permit an external flow of these costs by the firms. Transportation-related salaries amounted to only 7.5% of total operating costs in the case of the Class I firms, whereas fuel costs accounted for only 2.8%. As the use of brokers declined among the class of operators, the importance of the salary and fuel costs in the overall picture increased. The salary and fuel costs were 19.7% and 10.5%, respectively, in Class II operations, and 37.3% and 13.6% for Class III operations.

With respect to other cost categories, it should be noted that in the case of the Class I firms, the relative importance of the terminal costs seems surprisingly low, and suggests that a further study of this factor may be necessary should the trend continue. Also, the insurance and claims costs appear to be higher than one would expect, and again suggests the need for further consideration. Finally, it should be noted that the operating ratio increases from Class I to Class III. Discussion of the possible causes of this fact will be deferred until later in this report.

To facilitate comparison of the New Brunswick segment of the national scene and to place the New Brunswick data in perspective, data for all of Canada are presented in Table 3.2 for the year 1975. At the national level, Class I firms account for 7.1% of the total number of firms, and 59.5% of the total operating revenue. Both these values are higher than found in New Brunswick. At the national level, the top 20 firms account for 26.6% of the total operating revenue, suggesting a far lower degree of concentration than present in New Brunswick. There is, however, some difficulty in interpreting these concentration ratios, given that the data include only those firms domiciled in an area. A true picture could be obtained only by considering the question from the point of view of firms operating in a region or area of concentration.

Even a cursory examination of the data in Table 3.2 shows that there are significant differences in the two areas. The most significant difference, one which may well explain other differences, is the extent of usage of broker operators. Broker operators appear to be considerably less significant nationally, amounting to only 11.4% of total operating expenditures for all three classes considered together. The broker operators account for 2.6 times more of the operating costs in the case of New Brunswick than at the national level. The difference is even more pronounced in the case of the Class I carriers where the ratio is 3.7 to 1.0. This, of course, generates other differences. Transportation salaries and fuel costs appear to be significantly more nationally than for New Brunswick. (One likely cause of these findings is that two conditions exist with broker operators. One being that in some cases all fuel sales are made and reported by the prime carrier, for tax reasons, whereas in other cases some brokers may obtain their own fuel and hence do not record in total in the broker reported costs.)

The nature of the Class I industries and their differences also merits a few words of discussion. Transportation expenses account for 70.6% of total operating costs in the case of New Brunswick, but only 58.9% at the

Table 3.2

MOTOR CARRIERS FREIGHT: OPERATING REVENUES AND EXPENSES BY CLASS, CANADA - 1975
(millions of dollars or percentage)

	Class I		Class II		Class III		All Classes	
Number of Firms	183		537		1858		2578	
Item	($)	(%)	($)	(%)	($)	(%)	($)	(%)
Operating Revenue								
Freight	1 498.3		549.7		-		-	
Other	33.7		24.8		-		-	
Total	1 532.0		574.5		466.3		2 572.8	
Operating Expenses								
Transportation								
Salaries	317.9	21.7	132.8	24.0	117.9	26.7	568.6	23.1
Fuel incl. taxes	101.6	6.9	51.4	9.3	52.9	12.0	205.8	8.4
Payment to Brokers	159.3	10.9	82.3	14.8	39.1	8.9	280.7	11.4
Total	862.4	58.9	370.9	66.9	279.9	63.5	1 476.1	60.0
Maintenance	150.2	10.3	66.3	12.0	51.7	11.7	266.1	10.8
Terminal Expenses	185.3	12.5	18.5	3.3	8.9	2.0	205.8	8.4
Traffic/Sales Exp.	26.9	1.8	6.3	1.1	-	-	-	-
Insurance/Claims	42.5	2.9	17.5	3.2	-	-	-	-
Admin./General	198.4	13.6	75.0	13.5	100.6	22.8	511.1	20.8
Total Op. Expenses	1 463.8	-	554.4	-	441.0	-	2 459.2	-
Operating Ratio	0.955		0.965		0.946		0.956	

Source: Statistics Canada, Motor Carriers - Freight and Household Goods Movers, 1975.

national level. Other noticeable differences are in terminal and platform expenses - 6.4% in New Brunswick as against 12.5% nationally. Insurance and claims expenses are about 40% higher in New Brunswick. In the administrative and general expense category, the difference approaches 50%. With respect to the terminal and platform expenses, one conclusion which could be drawn is that truckload traffic is relatively more important in the case of New Brunswick. With respect to the administrative and general expenses category, the data reflect differences in the relative importance of the broker, though there are other unexplained differences. The insurance and claims question will be deferred until later in the report.

For the industry as a whole, transportation expenses are relatively less important than in New Brunswick. As before, this probably reflects the ability of the New Brunswick industry to externalize some portion of its costs through the use of broker operators. Terminal expenses are less important in New Brunswick. Again, this may well reflect a larger proportion of truckload shipments, and less need to assemble shipments into truckload lots. In addition, it also probably reflects the importance of the Class I firms relative to the total industry segment.

A conclusion can be drawn, even from this short discussion of the 1975 data that there exists real differences between the motor carrier industry in New Brunswick and the industry at the national level. In order to determine whether these differences are persistent, it is necessary to review the 1978 data base.

Data for the operation of the motor carrier industry domiciled in New Brunswick in 1978 are presented in Table 3.3. An examination of all classes taken together reveals only slight changes in the situation as between the two years. Transportation expenses as a proportion of total operating expenses fell slightly between the two years. While fuel costs increased by 50% in absolute terms, the increase in terms of relative importance was 0.2%. In this cost category, perhaps the most significant change was the decrease in the relative importance of salaries - a decline of 2.5 percentage points. Overall, total operating costs increased by 44.1% between the two years. On the other hand, operating revenues increased by 44.5% resulting in the operating ratio decreasing from 0.952 to 0.948.

There are difficulties involved in interpreting these changes. It is not clear, for example, how much of the operating cost increase was brought about by inflationary pressures and how much was caused by the growth in the number of firms included in the survey. The number of firms increased by 21.9%. Given the likely size of the additional firms, it appears highly probable that most of the increase was inflationary. However, it is impossible to identify the individual contribution of each of the two factors.

In the case of the Class I carriers, the number of firms increased by two whereas the operating revenue increased by 79.2% and the operating expenses increased by 79.8%. The operating ratio increased from 0.945 to 0.957. As stated before, it was not possible to separate the impact of the increased number of firms from the other factors contributing to increased operating revenues and expenses. The relative importance of insurance and

Table 3.3

MOTOR CARRIERS FREIGHT: OPERATING REVENUES AND EXPENSES, NEW BRUNSWICK - 1978
(millions of dollars or percentage)

	Class I		Class II		Class III		All Classes	
Number of Firms	6		14		69		89	
Item	($)	(%)	($)	(%)	($)	(%)	($)	(%)
Operating Revenue								
Freight	53.6		18.1		-		-	
Other	4.1		1.6		-		-	
Total	57.7		19.7		16.7		94.1	
Operating Expenses								
Transportation								
Salaries	5.8	10.5	3.0	16.7	3.3	21.0	12.1	13.6
Fuel incl. taxes	1.9	3.5	2.1	11.5	2.6	16.5	6.6	7.4
Payment to Brokers	21.8	39.6	4.4	24.4	1.3	8.2	27.5	30.9
Total	38.0	68.8	12.4	69.1	10.5	65.9	61.0	68.4
Maintenance	4.2	7.6	2.1	11.8	2.5	15.4	8.8	9.8
Terminal Expenses	5.3	9.5	0.6	3.1	0.2	1.1	6.0	6.7
Traffic/Sales Exp.	0.5	1.0	0.2	1.0	-	-	-	-
Insurance/Claims	3.1	5.7	0.5	2.8	-	-	-	-
Admin./General	4.2	7.5	2.2	12.1	2.8	17.6	13.5	15.1
Total Op. Expenses	55.2	-	18.0	-	16.0	-	89.2	-
Operating Ratio	0.957		0.913		0.957		0.948	

Source: **Statistics Canada, Motor Carriers - Freight and Household Goods Movers, 1978.**

claims, higher than nationally in 1975, increased still further. In absolute terms, this factor increased by 138.5%, accounting for 5.7% of total operating expenses in 1978.

Comparable 1978 data for the Canadian industry as a whole for 1978 are presented in Table 3.4. Nationally, the number of carriers increased by approximately a third, and Class I carriers increased by 48.6%. As in the case of the New Brunswick industry, the movement of carriers from one class to another makes intertemporal comparisons difficult. In the case of all Canadian carriers, operating revenues increased by 56.3%, while operating costs rose by 56.8%. The operating ratio increased from 0.956 to 0.959. This was a modest increase in the relative importance of payments to brokers between the two years, and this fact was reflected in a slight increase in the proportion of total operating costs accounted for by transportation costs. It should be noted that despite the rather large increases in the cost of fuel between the two years, fuel costs as a fraction of total operating expenditures actually fell between 1975 and 1978.

In the case of Class I carriers, the role of the broker increased. Broker payments increased from 10.9% of total operating expenses to 13.9%. The operating ratio over the time period increased from 0.955 to 0.968.

A comparison between the trucking industry in New Brunswick and the industry on a national basis in 1978 was completed. With respect to Class I firms, as found in the 1975 case, the major difference was in the importance of the role player by broker operators. While brokers accounted for 39.6% of total operating expenses in New Brunswick, the comparable national figure was only 13.9%. The gap between the two values closed during the period. However, the difference is still substantial. This fact leads to other differences. In New Brunswick, the relative importance of fuel is reported lower, as are transportation-related salaries. With the exception of insurance and claims expenses, all categories of cost are lower in New Brunswick. Relative to insurance and claims, the New Brunswick figure was 5.9% of the total while nationally, this category of expenses accounted for 2.9% - less than half the New Brunswick value.

In the case of Class II operations, there are in 1978 significant differences between the two levels of operation. These differences appear to be caused by the fact that broker operations are approximately 50% more important provincially as nationally. Because this gap is less in 1978 than 1975, the other reported differences are also less significant. It should be noted that, not withstanding the greater importance of broker operations, fuel expenditures appear relatively more important in the case of New Brunswick Class II firms.

Examination of data on Class III indicates that the broker situation is reversed, with the national figure being higher. This results in other differences in specific categories but the broker payments do not appear to be sufficiently higher to reverse all other trends. Fuel is a larger percentage of total costs provincially, but salaries are relatively more important nationally. Overall transportation expenses are marginally higher relative to other costs at the provincial level. Finally, while the Class III operating ratio in New Brunswick is identical with that for Class I, it is considerably higher than the national equivalent.

Table 3.4

MOTOR CARRIERS FREIGHT: OPERATING REVENUES AND EXPENSES BY CLASS, CANADA - 1978
(millions of dollars or percentage)

	Class I		Class II		Class III		All Classes	
Number of Firms	272		657		2 660		3 589	
Item	($)	(%)	($)	(%)	($)	(%)	($)	(%)
Operating Revenue								
Freight	2 538.0		725.0		-		-	
Other	64.0		17.0		-		-	
Total	2 602.0		742.0		677.0		4 021.0	
Operating Expenses								
Transportation								
Salaries	569.0	22.6	170.0	24.1	161.0	25.6	900.0	23.3
Fuel incl. taxes	167.0	6.6	69.0	9.8	78.0	12.4	314.0	8.1
Payment to Brokers	351.0	13.9	114.0	16.2	66.0	10.5	531.0	13.8
Total	1 516.0	60.2	473.0	67.0	404.0	64.2	2 393.0	62.1
Maintenance	283.0	11.2	88.0	12.5	82.0	13.0	453.0	11.8
Terminal Expenses	293.0	11.6	20.0	2.8	12.0	1.9	325.0	8.4
Traffic/Sales Exp.	48.0	1.9	8.0	0.1	-	-	-	-
Insurance/Claims	74.0	2.9	23.0	3.2	-	-	-	-
Admin./General	306.0	12.1	95.0	13.5	131.0	20.8	685.0	17.8
Total Op. Expenses	2 520.0	-	706.0	-	629.0	-	3 856.0	-
Operating Ratio	0.968		0.951		0.929		0.959	

Source: Statistics Canada, Motor Carriers - Freight and Household Goods Movers, 1978.

The discussion presented in this chapter completes the intertemporal comparison of the industry on a provincial and national level of the firms by class. The following section of the report examines the industry from the point of view of averages and what might be thought of as performance measures.

3.3 Motor Carriers - The Average Firm

This section of the report considers the industry from a different point of view from that previously presented. The approach discussed develops various averages for the industry by class and in total, and provides comparisons not only to the national situation, but also to the industry as it is domiciled in certain other provinces in Canada. Among others, this latter includes the province of Québec (generally regarded as the jurisdiction with the strictest degree of regulation) and Alberta (generally regarded as the least regulated).

At the outset of this discussion, it is necessary to offer several cautions to the reader, and to explain what must appear at the outset to be several ommissions. With respect to the former, the primary caution relates to the differing importance of the role played by the broker operator across the country. The broker is most important in the case of New Brunswick. Only in Newfoundland (27.9%), Saskatchewan (30.6%) and Alberta (30.7%) did the role of the broker approach even three quarters of the figure of the 39.9% of total operating expenses accounted for by brokers in New Brunswick in 1978. At the other extreme, the broker played the least significant role in the province of Québec where this segment of the industry accounted for only 5.7% of total operating expenses. While it has not been possible to ascertain the precise consequences of this factor, its impact must be kept in mind when comparing averages or ratios for selected provinces. A second caution relates to the small scale of the New Brunswick industry, and the fact that it appears that several large firms dominate. It has not been possible to measure the degree of this dominance, but an examination of the amount of equipment operated by individual firms indicates that it does exist.

Data, by class and in total, for the industry domiciled in New Brunswick and selected provinces as well as the national average are shown in Tables 3.5 and 3.6. Various averages are provided to give a picture of the operation of the average firm in various parts of Canada.

With respect to Class I carriers, the industry tends to be largest in the province of Ontario, and among those included, smallest in the case of New Brunswick. The former is roughly twice the latter. However, it is necessary to recall the differing use of broker operators. It seems fair to conclude that this difference accounts for most of the difference in average employment in these two cases. Alberta, where substantial use of the broker is made by the industry, has an average employment level below the Canadian average. Class II carriers are much smaller, employing on the average only about 12% as many people as the Class I operators. Unlike the previous case, the New Brunswick average this time is above that for Canada, and approaches that of the Class II Québec operations. Class III carriers are smaller still, employing on the average only 28% of Class II levels.

Table 3.5

MOTOR CARRIERS FREIGHT: VARIOUS AVERAGES, CANADA AND SELECTED PROVINCES - 1975 (1)

Class	Average Number Employees	Average Employee Compensation ($)	Average Revenue (million $)	Average Assets (million $)	Average miles per firm (millions)
Class I					
P.E.I.	-	-	-	-	-
N.B.	155.5	9 410	8.12	4.42	2.54
Québec	243.4	11 719	6.62	5.09	4.48
Ontario	308.6	12 965	9.56	6.18	5.54
Alberta	171.0	12 425	7.59	4.54	3.87
Canada	260.6	12 638	8.37	5.41	4.71
Class II					
P.E.I.	16.7	8 440	0.41	0.35	(2)
N.B.	37.3	9 520	1.22	0.66	1.22
Québec	40.1	11 000	1.13	0.65	0.94
Ontario	31.1	11 886	1.07	0.63	1.02
Alberta	23.3	12 657	1.04	0.51	0.81
Canada	31.9	11 540	1.07	0.59	0.91
Class III					
P.E.I.	12.5	8 400	0.30	0.18	-
N.B.	7.0	8 821	0.21	0.13	0.23
Québec	10.1	9 060	0.26	0.18	0.27
Ontario	9.0	9 788	0.26	0.16	0.25
Alberta	7.8	10 106	0.26	0.17	0.28
Canada	8.9	9 602	0.25	0.17	0.26
All Classes					
P.E.I.	13.3	8 410	0.32	0.21	0.23
N.B.	22.6	9 327	0.89	0.49	0.58
Québec	31.1	10 893	0.84	0.58	0.73
Ontario	45.7	12 377	1.42	0.90	1.05
Alberta	21.0	11 866	0.87	0.50	0.63
Canada					

Source: Calculated from data presented in: Motor Carriers - Freight and Household Goods Movers, Statistics Canada, 1975.

Notes: (1) 1976 is used instead of 1975. See Text.

(2) Included in Newfoundland.

Table 3.6

MOTOR CARRIERS FREIGHT: VARIOUS AVERAGES, CANADA AND SELECTED PROVINCES - 1978

Class	Average Number Employees	Average Employee Compensation ($)	Average Revenue (million $)	Average Assets (million $)	Average miles per firm (millions)
Class I					
P.E.I.	-	-	-	-	-
N.B.	152.3	13 134	9.62	3.86	1.82
Québec	265.5	16 168	9.47	5.55	4.11
Ontario	255.7	16 780	10.68	6.29	4.66
Alberta	129.1	17 594	8.11	4.76	2.93
Canada	219.8	16 831	9.56	5.46	3.90
Class II					
P.E.I.	22.7	11 265	1.12	0.57	0.77
N.B.	28.7	12 891	1.41	0.67	0.86
Québec	29.8	14 538	1.16	0.76	-
Ontario	25.9	14 730	1.09	0.66	-
Alberta	22.3	16 201	1.22	0.49	-
Canada	25.5	14 917	1.13	0.65	0.69
Class III					
P.E.I.	8.1	9 562	0.28	0.18	0.22
N.B.	6.0	10 746	0.24	0.11	0.23
Québec	7.4	11 745	0.26	0.16	0.20
Ontario	7.1	11 362	0.26	0.14	0.20
Alberta	6.1	12 337	0.26	0.16	0.18
Canada	6.7	11 868	0.25	0.14	0.19
All Classes					
P.E.I.	10.3	10 122	0.41	0.24	0.30
N.B.	19.5	12 504	1.06	0.45	0.43
Québec	29.4	15 039	1.07	0.65	0.57
Ontario	37.5	15 783	1.54	0.90	0.78
Alberta	17.3	16 041	0.96	0.52	0.46
Canada	26.3	15 553	1.12	0.64	0.56

Source: Calculated from data presented in: Motor Carriers - Freight and Household Goods Movers, Statistics Canada, 1978.

Table 3.5

MOTOR CARRIERS FREIGHT: VARIOUS AVERAGES, CANADA AND SELECTED PROVINCES - 1975 (1)

Class	Average Number Employees	Average Employee Compensation ($)	Average Revenue (million $)	Average Assets (million $)	Average miles per firm (millions)
Class I					
P.E.I.	-	-	-	-	-
N.B.	155.5	9 410	8.12	4.42	2.54
Québec	243.4	11 719	6.62	5.09	4.48
Ontario	308.6	12 965	9.56	6.18	5.54
Alberta	171.0	12 425	7.59	4.54	3.87
Canada	260.6	12 638	8.37	5.41	4.71
Class II					
P.E.I.	16.7	8 440	0.41	0.35	(2)
N.B.	37.3	9 520	1.22	0.66	1.22
Québec	40.1	11 000	1.13	0.65	0.94
Ontario	31.1	11 886	1.07	0.63	1.02
Alberta	23.3	12 657	1.04	0.51	0.81
Canada	31.9	11 540	1.07	0.59	0.91
Class III					
P.E.I.	12.5	8 400	0.30	0.18	-
N.B.	7.0	8 821	0.21	0.13	0.23
Québec	10.1	9 060	0.26	0.18	0.27
Ontario	9.0	9 788	0.26	0.16	0.25
Alberta	7.8	10 106	0.26	0.17	0.28
Canada	8.9	9 602	0.25	0.17	0.26
All Classes					
P.E.I.	13.3	8 410	0.32	0.21	0.23
N.B.	22.6	9 327	0.89	0.49	0.58
Québec	31.1	10 893	0.84	0.58	0.73
Ontario	45.7	12 377	1.42	0.90	1.05
Alberta	21.0	11 866	0.87	0.50	0.63
Canada					

Source: Calculated from data presented in: Motor Carriers - Freight and Household Goods Movers, Statistics Canada, 1975.

Notes: (1) 1976 is used instead of 1975. See Text.

(2) Included in Newfoundland.

Table 3.6

MOTOR CARRIERS FREIGHT: VARIOUS AVERAGES, CANADA AND SELECTED PROVINCES - 1978

Class	Average Number Employees	Average Employee Compensation ($)	Average Revenue (million $)	Average Assets (million $)	Average miles per firm (millions)
Class I					
P.E.I.	-	-	-	-	-
N.B.	152.3	13 134	9.62	3.86	1.82
Québec	265.5	16 168	9.47	5.55	4.11
Ontario	255.7	16 780	10.68	6.29	4.66
Alberta	129.1	17 594	8.11	4.76	2.93
Canada	219.8	16 831	9.56	5.46	3.90
Class II					
P.E.I.	22.7	11 265	1.12	0.57	0.77
N.B.	28.7	12 891	1.41	0.67	0.86
Québec	29.8	14 538	1.16	0.76	-
Ontario	25.9	14 730	1.09	0.66	-
Alberta	22.3	16 201	1.22	0.49	-
Canada	25.5	14 917	1.13	0.65	0.69
Class III					
P.E.I.	8.1	9 562	0.28	0.18	0.22
N.B.	6.0	10 746	0.24	0.11	0.23
Québec	7.4	11 745	0.26	0.16	0.20
Ontario	7.1	11 362	0.26	0.14	0.20
Alberta	6.1	12 337	0.26	0.16	0.18
Canada	6.7	11 868	0.25	0.14	0.19
All Classes					
P.E.I.	10.3	10 122	0.41	0.24	0.30
N.B.	19.5	12 504	1.06	0.45	0.43
Québec	29.4	15 039	1.07	0.65	0.57
Ontario	37.5	15 783	1.54	0.90	0.78
Alberta	17.3	16 041	0.96	0.52	0.46
Canada	26.3	15 553	1.12	0.64	0.56

Source: Calculated from data presented in: Motor Carriers - Freight and Household Goods Movers, Statistics Canada, 1978.

Employee compensation is the lowest in New Brunswick for Class I carriers for the jurisdiction sampled. This measure is the highest in Ontario, with even the Québec industry sector falling below the national average. In the case of Class II carriers, both Ontario and Alberta have employee compensation above the national average. Among those included, only the province of Prince Edward Island has compensation below that of New Brunswick. Class II compensation is below that for Class I by about 9% for the country as a whole. Class III employee compensation exhibits the same pattern as Class II although at a still lower level.

The comparison pattern changes when attention is turned to average revenue per firm. The change is no doubt due to the degree of broker operations in the various provinces. For Class I carriers, Ontario has the largest average revenue with New Brunswick second among those provinces included. In the case of Class II carriers, New Brunswick has the highest average revenue, with the industry in Québec in second place. Among Class III carriers, the industry in the province of Prince Edward Island ranks first and New Brunswick last among those included.

Next, the average assets per firm reveals that those provinces where brokers are most important (New Brunswick and Alberta) have the lowest figures for assets per firm. This result was to be anticipated. Ontario recorded the highest figure. The fact that does not follow the expected pattern is Québec, where the brokers play the smallest role and which is the most tightly regulated province in Canada, has an average asset figure which is 6% below the national average. In the case of Class II operations, New Brunswick ranks first, followed by Québec with both being above the national average. In the case of Class III firms, New Brunswick has the lowest average among the provinces included in the analysis.

Finally, it is necessary to consider the average mileage for the typical firm both on the basis of the individual classes and for the industry domiciled in the various areas under review here. While tonnage figures would provide a better indication of the activity of the firms, these are not available on a province of domicile basis.

The comparison of mileage is made between the 1976 and 1978 data - a different basis from that used in the previous analysis. It was necessary to reject the 1975 mileage figures because an initial consideration of the data revealed that a decline in mileage occurred for firms resident in Canada of some 15.6%, while the volume of fuel purchased increased by 29.5%. This suggested that one of the sets of numbers were inaccurate, and further investigation strongly suggested that it was the earlier figures. When the mileage figures were divided by gallons of fuel consumed, the 1975 and 1978 results indicating the anticipated fuel efficiency were consistent. Firms domiciled in Nova Scotia obtained 4.512 miles per gallon in 1978 while the New Brunswick figure was 4.739 miles per gallon. For Canada, Québec and Ontario, the range was between 4.701 and 4.796 miles per gallon. When the same calculations were made for 1975, the range was between 3.462 m.p.g. (Nova Scotia) and 18.429 m.p.g. (New Brunswick). As a consequence, the 1975 figures were rejected, and the comparison was based upon 1976 and 1978.

In the case of Class I truck operations, New Brunswick registered the lowest average mileage in 1976. Québec and Alberta also had averages below the Canadian average, with Ontario considerably above. The same pattern is apparent from the 1978 data, except that Québec exceeded the national average. The data also revealed a decline in the average mileage in all cases between the two years. This was most likely brought about by the inclusion of firms at the lower end of the Class I range.

In the case of Class II operations, the average firm in New Brunswick recorded the largest mileage, followed by Ontario, and Québec, both being above the national average. While the 1978 data are incomplete at the moment, they do indicate that, as in the case of Class I operations, there was a decline in average mileage between the two years. The average New Brunswick firm remained above the national average.

The average Class III operation exhibited the same trend as the others. In 1976, the average New Brunswick firm was second only to Ontario, and above the national average. While there was decline between the two years, the New Brunswick average fell less than others, so that in 1978, it had the highest mileage among those considered.

For the industry overall, Ontario domiciled firms recorded the highest average mileage in both years. Reflecting the situation in Class I averages, New Brunswick domiciled firms recorded an average mileage well below the Canadian average. As in the individual cases of the three classes above, there was a decline in average mileage between the two years. It is thought that this decline was caused by the movement of firms from one class to another within the sample universe.

Ideally, at this point, one would want to construct and estimate several equations in an attempt to explain the cost behaviour of the firms involved. However, such an exercise would, to a very large extent, be futile because of the identified differences among the operations. Without a larger reliable data base concerning the whole question of broker operations, traffic volumes, and the nature of the shipping patterns (TL versus LTL, for example), the coefficients estimated would be difficult to interpret and most likely even misleading.

3.4 Concentration in the Industry

In the usual measures of concentration, it is customary to compute the share of a particular measure accounted for by the top four, eight or specified number of firms. Such an approach is not possible in this analysis of the for-hire motor carrier industry. As an alternative, it was decided to base the degree of concentration on the proportion of revenues accounted for by Class I operations out of the total received by carriers domiciled in the province of New Brunswick. In certain cases, this happens to work out to the share accounted for by the largest four firms but is not the result in all cases. The share of freight revenues accounted for by Class I firms in New Brunswick and the Top 100 firms in the nation together with the Class I firms at the national level for the period 1975 to 1978 are shown in Table 3.7 below.

Table 3.7

SHARES OF TOTAL FREIGHT REVENUES ACCOUNTED FOR BY VARIOUS SUB-GROUPS
CANADA AND NEW BRUNSWICK
1975 TO 1978 INCLUSIVE
(percent)

Subgroup	1975	1976	1977	1978
New Brunswick Class I	53	57	60	63
Canada Largest 100 Firms	53	53	57	60
Canada Class I	62	64	65	67

Source: Calculated from data in Motor Carriers Freight.

For the years 1975 to 1977, there were four Class I firms domiciled in New Brunswick - the number corresponding to one of the usual concentration ratios. In 1978, there were six firms in this category. It was not possible to subdivide this group.

It can be concluded that the degree of concentration in the motor carrier industry is considerably higher in the case of New Brunswick domiciled firms than is the case nationally. Furthermore, abstracting from the 1978 data, because of the increase in the number of firms in the subgroup, it is apparent that the degree of concentration increased, the rise being a full seven percentage points. At the same time, the share of the Canadian market accounted for by the largest 100 firms in the country has fallen modestly over the period under review. The situation, with respect to Class I carriers at the national level, is the same as in the case of the New Brunswick Class I carriers. The share of the market accounted for by this group increased during the period under review, though the extent of the increase was not as great as in the case of the provincial segment of the industry.

Ideally, other measures of concentration should be explored. However, in view of the differing structures of the industry across Canada, this was deemed not to be feasible. The structures would distort other concentration measures which might be employed.

3.5 The Role of the Broker

The importance of broker payments as a component of total costs in the New Brunswick industry has already been examined. It was shown that, in 1978, the total payments to brokers accounted for 30.9% of total operating costs for the industry as a whole. In the case of Class I operations, the role was even more important, accounting for 39.6% of total operating costs. The comparable national figures were 13.8% and 13.9%, respectively. Furthermore, in New Brunswick, the Class I payments to brokers accounted for 79% of the total industry payments. It is, therefore, necessary to explore the role of the broker somewhat more fully, particularly in the case of Class I carriers.

Unfortunately, very little information exists in the public domain concerning the broker operator. However, it is possible to consider that role from the point of view of equipment. The Atlantic Provinces Transportation Commission publication "The Atlantic Provinces Transportation Directory", 1979, has been used in this regard. It provides some information concerning the equipment operated under the licenses of various carriers domiciled in New Brunswick, and some of that data have been extracted for use in this study. It must be pointed out that there is considerable risk in regarding these data as accurate, because it was necessary to make judgments as to which of the firms in the APTC publication might fall into the Statistics Canada category of Class I truckers. They should, therefore, be taken only as indicative of the situation prevailing in the province of New Brunswick at that point in time. When the question is considered from the point of view of the entire industry, the data are less reliable for in some instances, the APTC publication did not specify equipment operated. The data available are set out in Table 3.8 below.

Table 3.8

EQUIPMENT OWNED, LEASED, OR OPERATED BY NEW BRUNSWICK DOMICILED FIRMS
1978 GENERAL FREIGHT CARRIERS

Category of Firm	Tractors Units	Straight Trucks Units	Semi-Trailers Units
Largest four or Class I			
From APTC Data	663	340	1015
Stats. Canada Class I	184	114	1024
Apparent Broker Involvement	479	226	
Total Available Data			
From APTC Data	783	437	1394
Stats. Canada All Classes	331	243	1251
Apparent Broker Involvement	452	194	-

Sources: Statistics Canada and Atlantic Provinces Transportation Commission Data.

It is obvious that there are problems with the data. In both instances, the number of power units apparently operated by brokers appears to decrease when a shift is made from the Class I data to using the total operations as a measure. This is due mainly to the absence in the APTC data of information about equipment operated by the smaller carriers. In the absence of the more reliable data, these do give an indication of the question of the broker's role in the trucking industry.

Even with these limited data available, it is apparent that the role of the broker in the New Brunswick motor carrier industry is significant. In the case of the larger operations, the broker appears to provide up to 72% of the tractor units, and as much as 66% of the straight truck units. In the case of the former, if highway tractors only could be segregated, the percentage would be much higher. For the industry as a whole, these figures were 58% and 44%, respectively. These figures reinforce once again the dangers involved in making firm comparisons between the New Brunswick and national industries.

In addition, there are other influences of the broker operations which are impossible to come to grips with on the basis of the information available. It is apparent that their use allows the firms to externalize significant proportions of their costs, for example, fuel, maintenance, and depreciation expenses. It is not clear whether the firm's risks are reduced or not, for there are no data concerning the guarantee arrangements between the carriers and the brokers.

It is clear that an in-depth study of broker operators is a necessary prerequisite to a full understanding of the motor carrier industry, particularly, in the case of New Brunswick. However, such a review is beyond the scope of the present study.

3.6 Summary and Conclusions

It is clear that the industry as domiciled in the province of New Brunswick is of a different structure than that operating nationally. The most significant difference is the role played by the broker operator, and this in turn creates other structural differences. For example, the relative importance of fuel costs. Within the New Brunswick industry itself, there are significant differences as well. As before, these appear to be mainly the result of the differences in broker importance.

The relative importance of the broker operations results in differences in the averages computed for firms domiciled in various parts of the country. Viewed from some of the averages, the New Brunswick firm in Class I appears to be smaller than the typical Canadian firm. This is true for such measures as employment per firm, assets per firm, and mileage per firm. However, when viewed from the point of view of average revenue, the New Brunswick firm is larger than the Canadian average. The averages must, therefore, be viewed with considerable caution, and this situation, in the case of New Brunswick, precludes further rigorous statistical and/or economic analysis. The absence of data on the tonnages moved by the New Brunswick domiciled firms further complicates the matter.

The degree of concentration appears to be higher in the New Brunswick industry than nationally, at least on the basis of the measure employed in this study which appears to be the only one applicable in view of the widely differing organizational structures employed across the country. Furthermore, there is evidence that the degree of concentration among the largest firms in the New Brunswick case is increasing. At the same time, the share accounted for by the largest 100 firms in the country decreased slightly during the period considered. Nationally, the dominance of Class I carriers increased.

The broker plays an extremely important role in the New Brunswick industry, accounting for most of the motive power employed. Unfortunately, little is known about the nature of the broker operations, and an in-depth study of this segment of the industry across Canada should receive a high priority in the immediate future. Such a review is beyond the scope of the present study.

Chapter 4

MOTOR VEHICLE REGULATION

4.1 Introduction

The trucking industry in New Brunswick, as in other jurisdictions, can be regulated in two ways. First, legislation enables the regulation of motor vehicle and other haulage units relative to the operation of the units. The second area of regulation is in the economic realm dealing with such factors as entry control and rate-making. This section of the report deals with the first aspect of regulation of trucks in New Brunswick through the Motor Vehicle Act. The Minister of Transportation is responsible for the administration of the Motor Vehicle Act. This is accomplished through the office of the Registrar of Motor Vehicles which reports through the Deputy Minister of Transportation.

In the Act, the myriad of rules and regulations, outlining the procedures for the licensing of drivers and vehicles, traffic laws, and overall rules of the road, are established. The importance of this Act on the trucking industry is obvious. In the following chapter, specific concerns of the trucking industry regulated in New Brunswick under the Motor Vehicle Act are outlined. This review is not meant to be a comprehensive examination of the Act; rather, it is an overview of the Act as it pertains to the specific issues raised within the terms of reference of this study.

4.2 Licensing of Vehicles

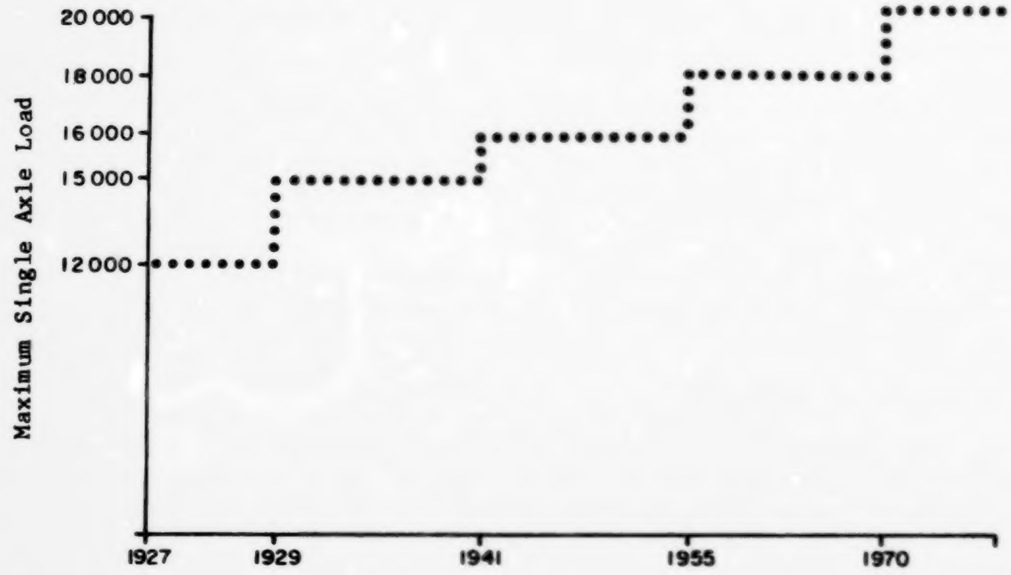
The Registrar of motor vehicles is responsible for the licensing of all motor vehicles being used on the province's highway system. Within the Act, trucks are classified together with all other truck tractors, buses, oil tank trucks as being commercial vehicles. This definition excludes only passenger cars. Trucks are then subject to the regulations affecting this class of vehicle. The registration fees of commercial vehicles are based on the unladen curb mass and can vary up to $1 503.00 per year.

4.3 Truck Weights in New Brunswick

The province of New Brunswick has exercised control over truck weights since 1927. At that time, a regulation was enacted that limited the maximum load on a single axle to 12 000 lbs. The maximum Gross Vehicle Weight was equal to the sum of this maximum in each axle of the vehicle. This maximum was subsequently increased over time, as shown in Figure 4.3.1 to 15 000 lbs. (1929), 16 000 lbs. 1941) and 18 000 lbs. (1955). The most recent change enacted in 1970 increased this single axle load to 20 000 lbs. Logically, as these axle weight allowances were increasing so was the

Figure 4.3.1

HISTORICAL GROWTH OF MAXIMUM SINGLE AXLE WEIGHTS



Gross Vehicle Weights (GVW) of the vehicle. However, the gross weights were increasing at a faster rate through an increasing use of tandem axles and an ever growing use of truck-trailer combinations.

A major development in Gross Vehicle Weight regulation took place in New Brunswick in 1970. The entire scope of truck weight regulation changed from a simple application of maximum single and tandem axle loadings in a truck to a more sophisticated regulation based on the projected impact of the truck on the highways and bridges in the highway system. The new regulation, based on the "Ontario Bridge Formula", combined the new 20 000 lbs. single axle maximum and an allowance of 600 lbs. per inch of tire on pavement width limit. Most importantly, it considered the spacing of these loads and the ability of a structure to support the combined load.

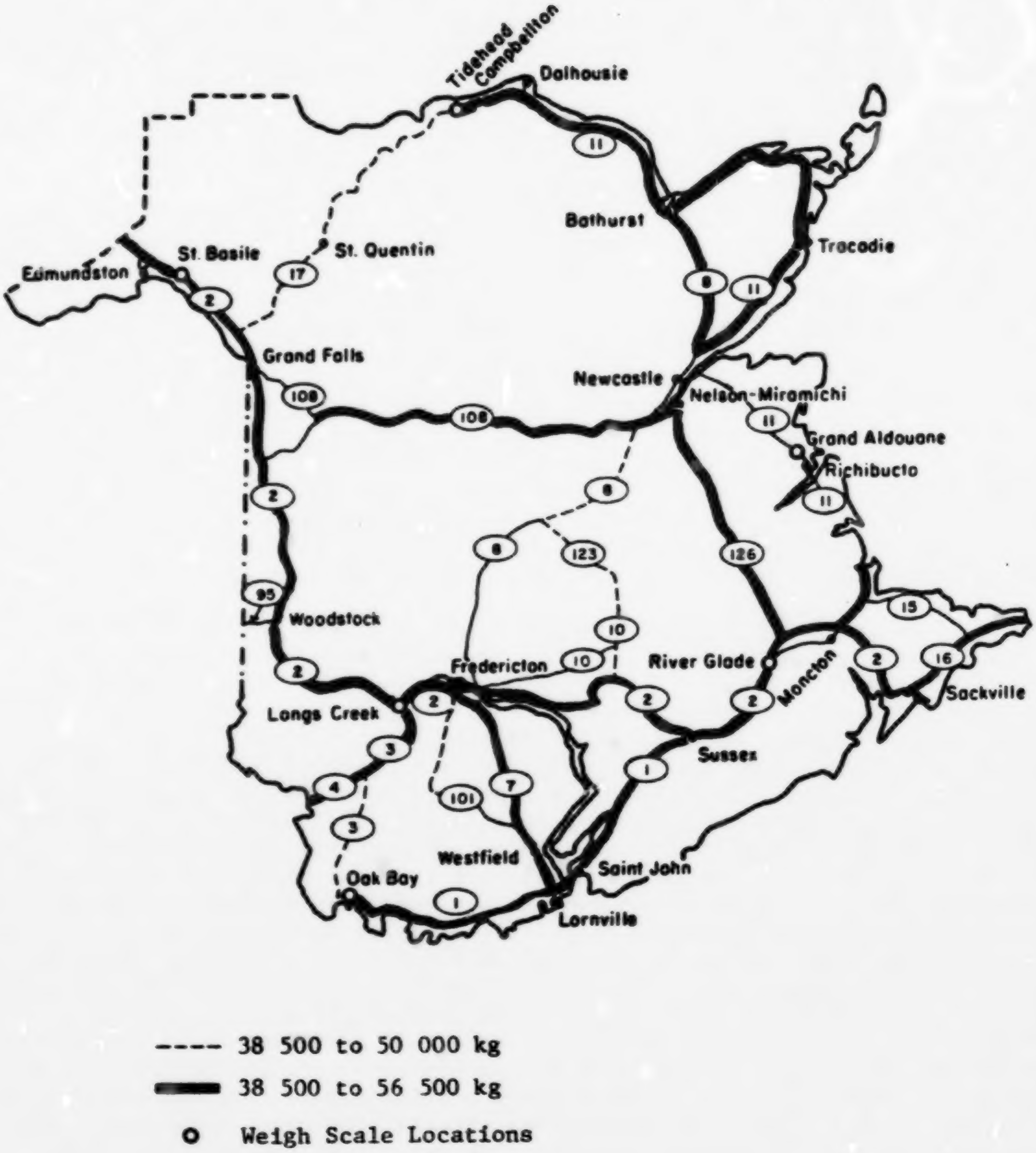
Under this legislation, the maximum allowable GVW of a common three-axle tractor and tandem axle trailer was increased from 74 000 lbs. to 80 000 lbs. The legislation also allowed for the use of the "trailer train" units or the use of a tractor with two trailers. The allowable GVW for a trailer train consisting of a three-axle tractor, a tandem axle semi-trailer, and a three-axle full trailer operating in combination was now 125 000 lbs. The achievement of this weight depended upon the correct loading and spacing of the individual load carrying axles.

The trucking industry reacted quickly to the new allowances in 1970 and the truck trains became evident on the arterial highways in the province. The development of new truck combinations, in particular, the three-axle long trailer, necessitated later revisions to the regulations. Weight regulations are established in Part IV, Section 231 of the Motor Vehicle Act. Appendices A, B, and C list the allowable masses on the front axle, allowable tandem masses, and maximum gross masses for the different vehicle combinations listed in Appendix B.

As mentioned earlier, the new regulations are comprehensive and sophisticated and based largely on the ability of a bridge structure to support the combined axle loads. The quality and structural adequacy of bridges are therefore very important in allowing these greater loads. In 1963, the New Brunswick Department of Transportation adopted a heavier design standard for bridges. At that time the Standard AASHO H-25 S20 was adopted and bridges built after that time were designed and constructed to this standard. Conversely, bridges built before that were not designed for these loadings. The higher GVW trucks are, therefore, restricted from bridges (and consequently from routes) that were not built to the H-25 S20 Standard. Part IV of the Motor Vehicle Act specifies routes over which these higher GVW trucks may be operated. A map of New Brunswick illustrating these routes is contained in Figure 4.3.2. In this diagram two classes of routes are illustrated, those accepting a truck mass of 56 500 kg (125 000 lbs.) and routes which are restricted to 50 000 kg (110 000 lbs.). The remainder of the roads in the system are restricted to 36 300 kg (80 000 lbs.). Appendix B also contains Part IV, Section 231 of the Motor Vehicle Act and is included to provide a more complete description of these routes. Generally most of the arterial and major collector roads are approved for the heavier loadings. As well, a series of local roads connecting major industries (e.g., pulp mills) to an arterial road have been upgraded and are specified as being capable of handling heavier trucks.

Figure 4.3.2

NEW BRUNSWICK ROUTES CAPABLE OF CARRYING TRUCKS
WITH A GVW IN EXCESS OF 36 300 kg


Tidehead
Campbellton
Dalhousie
11
Bathurst
Tracadie
St. Basile
St. Quentin
Edmundston
17
2
8
11
Grand Falls
Newcastle
Nelson-Miramichi
108
108
11
Grand Aldouane
Richibucto
2
8
11
8
123
126
95
Woodstock
10
15
Fredericton
10
River Glade
Moncton
2
2
2
16
Sackville
Longs Creek
2
3
1
Sussex
4
101
7
3
Westfield
Saint John
Oak Bay
1
Lornville
---- 38 500 to 50 000 kg
━━ 38 500 to 56 500 kg
○ Weigh Scale Locations

The utilization of heavier vehicles on New Brunswick roadways is examined on the basis of the 1976 Origin-Destination Study in Table 4.3.1 and further illustrated in Figure 4.3.3.

Table 4.3.1

TRUCK CONFIGURATIONS BY COMMODITY
(proportions - %)

Commodity	Straight Truck (%)	Semi-Trailer (%)	Full Trailer (%)	Double Semi (%)	Trailer Train (%)
Unidentified	56.4	42.0	0.5	0.4	0.6
Farm Products	59.5	38.8	0.6	0	1.1
Forest Products	39.6	59.6	0.4	0.1	0.3
Sea Products	63.1	36.9	-	-	-
Minerals	69.5	28.7	2.6	-	0.1
Manufactured goods	40.8	56.8	0.3	0.5	1.6
Mixed / Other	51.7	45.0	1.1	0.3	0.6

These figures indicate the relative popularity of the straight truck and the tractor-semi-trailer combination. In all cases the double semi, full trailer and train combinations comprise a minor (about 2%) part of the total truck traffic. The semi-trailer combination is particularly significant in the movements of forest products and manufactured goods where these units outnumber the straight truck. It is unfortunate that a separate category for triple axle semi-trailers was not considered in the survey. This particular combination has been growing in popularity since 1973 when regulations were expanded to include them. However, the extent of this growth is not quantifiable using the 1976 data.

The truck type data was further examined by location to determine the relative popularity of truck types at different locations throughout the province. Again the 1979 data was analysed and is summarized in Table 4.3.2. In this table, the proportion of truck types by weight scale location are illustrated. The location of the stations is illustrated in Figure 4.3.4.

Figure 4.3.3

PROPORTION OF TRUCK TYPES USED TO TRANSPORT SPECIFIC COMMODITIES

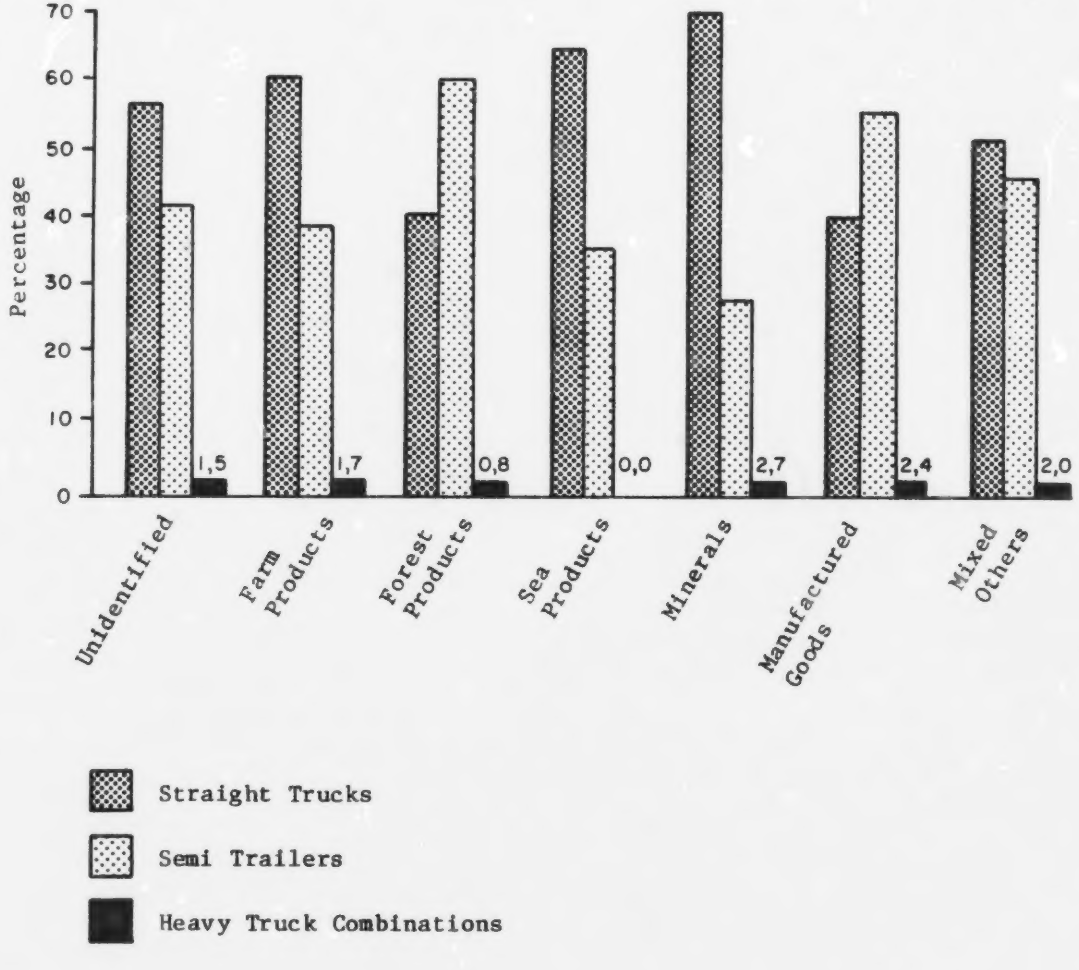
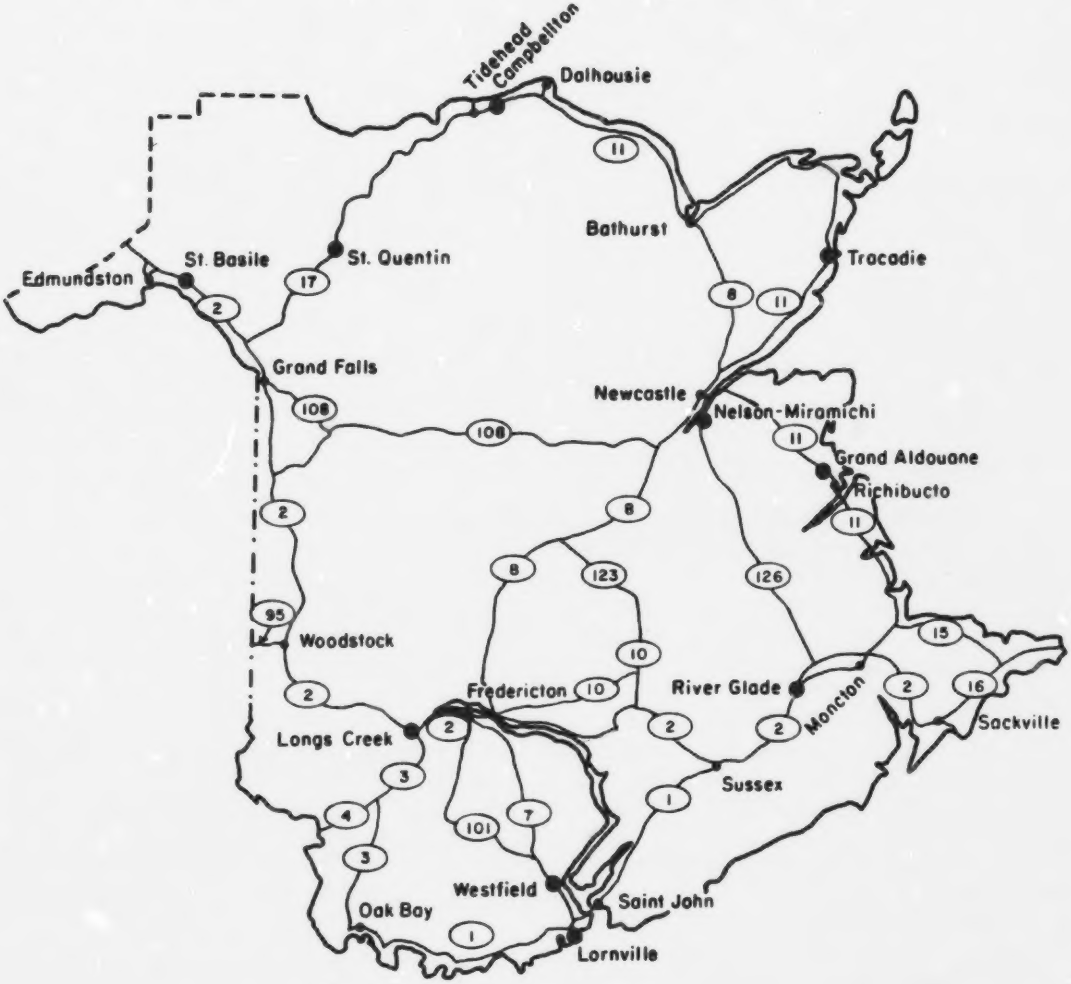


Figure 4.3.4

LOCATION OF SURVEY STATIONS


Tidehead
Campbellton
Dalhousie
11
Bathurst
Tracadie
St. Basile
St. Quentin
Edmundston
17
2
8
11
Grand Falls
Newcastle
Nelson-Miramichi
108
108
11
Grand Aldouane
Richibucto
2
8
11
8
123
126
95
Woodstock
10
15
Fredericton
10
River Glade
2
16
Moncton
Sackville
2
2
Longs Creek
2
3
Sussex
4
1
101
7
3
Westfield
Saint John
Oak Bay
1
Lornville

● Survey Stations

Table 4.3.2

PROPORTION OF TRUCK TYPES BY SURVEY LOCATION - 1979

Location	Annual Truck (Volume)	Straight Truck (%)	Semi-Trailer (%)	Full Trailer (%)	Double Semi (%)	Trailer Train (%)
Longs Creek	143 712	35.4	60.8	0.7	0.5	2.3
Riverglade	170 949	34.2	63.7	0.3	0.1	0.9
Aldouane	75 733	69.3	29.9	0.2	0.3	0.1
St. Basile	169 684	46.0	52.0	0.4	4.0	8.0
Westfield	180 494	49.6	47.6	4.0	10.0	14.0
Nelson	88 92	41.4	57.8	6.0	0.0	1.0
St. Quentin	52 806	67.6	31.3	0.7	1.0	2.0
Tracadie	71 971	78.7	21.1	0.0	0.0	0.0
Lornville	136 301	58.1	38.3	20.0	5.0	8.0
Campbellton	53 995	65.3	34.1	1.0	2.0	2.0

4.4 Spring Weight Reductions

With the allowance of heavier wheel and axle loadings on the province's highway system, the New Brunswick Department of Transportation has been carefully monitoring the strength of the highway system. This concern is especially important during the spring when the annual thaw weakens the road pavement structure. The need for spring weight restrictions has thus been recognized and used to control the loads on roadways during this critical period.

The New Brunswick Department of Transportation has monitored the strength of its highways during the spring period for the past two decades. Using the Benkleman beam, pavement strengths in some 31 road sections are monitored on a regular weekly basis to determine the fluctuations in strength that occur and the period in which the roads should be restricted. This current year, the Dynaflec device is being used to monitor pavement strength.

Spring weight restrictions have been of particular concern to the New Brunswick trucking industry. The time period of spring weight restriction has been illustrated in Table 4.4.1 for the years 1976 to 1980.

Table 4.4.1

SPRING WEIGHT RESTRICTION DURATION

	Northern N.B.			Southern N.B.		
Year	Start Date	Finish Date	Duration (Days)	Start Date	Finish Date	Duration (Days)
1976	Mar 14	May 24	71	Mar 14	May 23	70
1977	May 27	May 25	59	Mar 13	May 22	70
1978	Mar 19	May 31	73	Mar 12	May 28	77
1979	Mar 18	May 13	56	Mar 11	May 13	63
1980	Mar 16	May 18	64	Mar 09	May 18	71

This table shows that the roads are closed for different periods of time in the north and south halves of the province reflecting the seasonal temperature differences between these zones. The table also shows that the period of road closure is longer in the southern half of the province.

The road closure affects many miles of highway in New Brunswick. Figure 4.4.1 illustrates the roads affected by the 1980 spring weight restrictions. This diagram shows that many miles of arterial highway were, in fact, unrestricted during this period. The unrestricted mileage includes all of the Trans-Canada Highway system in the province as well as other arterial highways that have been developed or upgraded in recent years. The remainder of the arterial system was restricted to 90% or 80% of the normal GVW of trucks depending on the conditions of the pavement. All other highways in the province were restricted to 60% of the GVW.

The province of New Brunswick has recognized the penalty to the trucking industry imposed by spring weight restrictions and in time has eased these restrictions. Table 4.4.2 illustrates the difference between the 1970 and 1980 spring weight restricted highways.

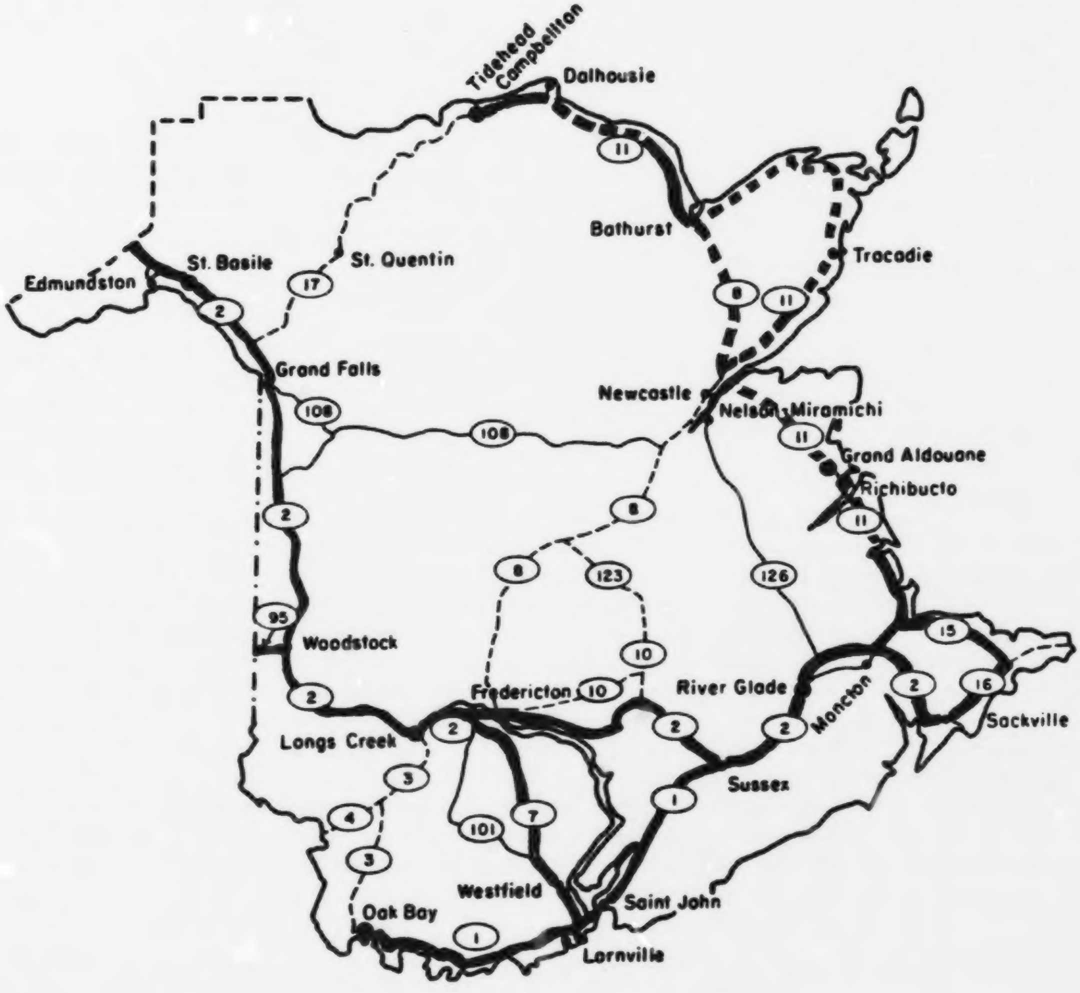
Table 4.4.2

PROGRESS IN GVW RESTRICTIONS

	Miles of Highway affected by GVW Restrictions			
Year	100%	90%	80%	75%
1970	595	NA	NA	821
1980	722	289	581	NA

Figure 4.4.1

1980 SPRING WEIGHT RESTRICTIONS


Tidehead
Campbellton
Dalhousie
11
Bathurst
Tracadie
St. Basile
St. Quentin
Edmundston
17
2
8
11
Grand Falls
Newcastle
Nelson-Miramichi
108
108
11
Grand Aldouane
Richibucto
2
8
11
8
123
126
95
Woodstock
10
15
Fredericton
10
River Glade
2
2
16
Moncton
Sackville
2
2
Longs Creek
2
3
Sussex
4
101
7
1
3
Westfield
Saint John
Oak Bay
1
Lornville

▬ 100 % of GVW

▬ ▬ ▬ 90 % of GVW

--- 80 % of GVW

● Weigh Scale Stations

(All Other Roads, 60 % of GVW)

It is seen in this table that in the last decade the number of all weather or restriction free miles increased by 20%. Also of significance is the number of miles that were restricted to 75% of the GVW in 1970 and were upgraded to either 80% or 90% restriction in 1977. These changes allowed truckers a significant improvement in the truck payload. Also, in 1977, the minimal restriction on minor highways was relaxed from 50% to 60%. The province of New Brunswick this year (1981) has further relaxed these restrictions. This year the nominal restriction has been reduced to allow 80% of the GVW on all highways. This will be of particular benefit to local trucking, much of which was formerly restricted to the nominal 60%. Transporters of agricultural products, particularly bulk milk, feed, and potatoes made frequent applications for a relaxation of the 60% restriction. With the 80% allowance in force, it is considered that the need for further relaxation will not be required.

It is seen, therefore, that the problem of spring weight restrictions is generally being cased in New Brunswick through the development of an improved arterial highway network and through the gradual relaxation of weight restrictions on the collector and local system.

The forest industry is perhaps the most severely affected by the spring road break-up. Normally the wood extraction process ceases during the period of weight restriction. A significant proportion of this industry is concentrated in the north and east sections of the province where roads are most severely restricted. As well, however, this industry, particularly for the shipment to the mill, uses the collector and local road system where the limits are most severe. However, relaxation of the spring weight restrictions may not have a significant impact on this industry due to the similarly poor conditions in the forests and on the many miles of private "company" roads during this period.

Spring weight restrictions apply to all vehicles on the highway except school buses and there are no commodities that are exempt. Special permits are granted by the Department of Transportation if it is considered that the restriction will cause undue hardship to a particular user.

Enforcement of the spring weight restrictions is accomplished through the New Brunswick Highway Patrol. During the spring period, traffic weights are monitored at a series of truck scales located throughout the province as well as spot checks on highways using portable scales. A vehicle found to be overweight is guilty of an offense and the owner is subsequently fined. Also, the vehicle is stopped until a suitable portion of the load is removed to bring the vehicle within weight tolerances.

4.5 Safety

The general operating framework of the New Brunswick Highway Transportation System is contained within the Motor Vehicle Act. In this Act, rules and regulations covering the rules of the road, traffic ordinances, and highway safety are established. Specific parts of the Act are unique to trucks. Such elements as: dimensions and weights; details of loading; and, the load security are dealt with in some detail. A number of noteworthy points will be briefly made as significant to the trucking industry.

An important point is that trucks, as commercial vehicles, are not required to undergo an annual motor vehicle inspection. Until 1981, all trucks were exempt from the inspection program. However, the program has now been expanded to include the light trucks and vans that now form a significant part of the motor vehicle population.

It is considered that the development of the truck inspection program in New Brunswick is highly likely within the next few years. It is interesting that one of the proponents of such a scheme are some of the larger trucking firms operating in the region.

Speed limits on the provincial highway system vary depending upon traffic and the conditions of the driving environment. The major arterial highways with some degree of access control are posted at 100 km per hour. This speed limit is generally reserved for highways with good geometry, both in alignment and cross section, and with adequate access control. The remainder of the arterial highways are posted at 90 km/h except where localized conditions may require the reduction of this limit to as low as 50 km/h. The collector highway system generally operates at 90 km/h where conditions permit. The local roads generally operate at a lower speed and where not posted - the speed limit is considered to be 80 km/h.

Very little legislation presently exists with respect to the movement of hazardous commodities by truck in New Brunswick. Regulations under the Motor Vehicle Act require the posting of the word "Dangerous" on a commercial vehicle transporting a quantity of goods in excess of 2 500 lbs. Essentially the same regulation applies to trucks carrying radio-active material.

The province of New Brunswick has been working with the Government of Canada in its development of policy and regulations with respect to the transportation of dangerous commodities. It is considered highly likely that the regulations under the Motor Vehicle Act will be expanded to include the conclusions of Transport Canada's work in this matter.

Chapter 5

ECONOMIC REGULATION OF THE TRUCKING INDUSTRY

5.1 General

The economic regulation of trucking is usually justified on the grounds of the protection of the interests of some particular group. In some cases, it is argued that the consumer or user of transportation services should be protected, and in these instances, regulation usually takes the form of the control of rate increases. In other situations, it is argued that firms require protection from each other. Here, typically, the protection tends to take the form of minimum rate control which is designed to prevent ruinous competition. That there is some conflict between these two objectives is obvious. At other times, it is argued that the public service conditions imposed upon carriers require internal cross-subsidization, and that the denser, usually more profitable, routes served by carriers should be protected from the inroads of additional competition to ensure adequate earnings to permit this cross-subsidization to occur. Finally, it is sometimes suggested that the function of entry control is to permit the orderly development of the industry and to allow some measure of balancing of the capacity and demand, since substantial excess capacity is viewed as having undesirable side effects.

It is with this general background in mind that the regulation of trucking in New Brunswick is discussed. One question to be addressed is the extent to which these processes attain the objectives of regulation set out above. As is the case in most jurisdictions, the regulation of trucking in New Brunswick takes place under authority of both federal and provincial statutes. Under the terms of the Motor Vehicle Transport Act, an outgrowth of the Winner case, the New Brunswick Motor Carrier Board has been delegated authority over extraprovincial for-hire motor transport. It derives its authority over intraprovincial for-hire motor transport from both the provincial Motor Carrier Act and the provincial Public Utilities Act.

This chapter relies heavily upon two papers completed by the New Brunswick Law Reform Commission. The first of these, "The Motor Carrier Board", examines the Board from the legal point of view, focusing on such questions as jurisdiction and procedures. The other, "The Public Utilities Board Study", is used only in part, for it covers matters other than the regulation of motor transport. In addition, the Transport Canada study "The Institutional Framework of the Canadian Trucking Industry", is cited in several places.

The chapter begins with a review of the Motor Carrier Act and related Regulations, as well as relevant sections of the Public Utilities Act. The objective here is to determine the framework within which trucking regulatory function operates. Put another way, the objective is to define what might be thought of as the theory of trucking regulation as it exists in New Brunswick. The second phase is to review the three studies cited above with particular focus on the practices and procedures of the Board. Finally, an attempt will be made to assess the actions of the Board in recent years. Of interest here are the questions of how practice conforms to the theoretical operation, and how regulation in New Brunswick achieves the usual justifications for regulations set out in the first paragraph of this chapter.

It has been shown in Chapter 3 that the structure of the trucking industry in New Brunswick is different from that in most other parts of the country. This is particularly true when one considers the role of the broker. One question addressed in this chapter is whether the regulatory framework has contributed to the importance of the broker, or whether it is due to other factors. Other possible impacts of regulation, and the resulting impact on the economic performance of the industry, will be deferred until the following chapter. In explaining the role of the broker, one possible hypothesis would be that the difficulty of obtaining operating authority from the Motor Carrier Board results in the development of the broker who operates under this umbrella license of the firm for whom the broker works.

5.2 Legislative Provisions - The Motor Carrier Act

Regulation of the motor carrier industry in New Brunswick is carried out under the provisions of the Motor Carrier Act and the Public Utilities Act. Regulation is the responsibility of the Motor Carrier Board, and there is a close relationship between this Board and the Public Utilities Board. Section 2 of the Motor Carrier Act specifies that the Motor Carrier Board shall consist of the members of the Board of Commissioners of Public Utilities, the Secretary of the Board of Commissioners, and the Registrar of Motor Vehicles. Furthermore, the Chairman, Secretary, and Assistant Secretary of the Board of Commissioners are respectively the same officers for the Motor Carrier Board. Any three members of the Board constitute a quorum, and in the absence of the Chairman, any other member may be selected to act in that role. Any officer of the Board may act for the Board between meetings, but with the exception of the granting of temporary operating authority, orders or decisions made under this provision are effective only until the next meeting of the Board.

The Chairman has the authority to appoint two members of the Board to hold hearings at any location in the province. These members are authorized to do anything that the Board may do, but their actions are subject to approval by the Board. Where this procedure is used, and the applicant is dissatisfied with the result, he may request the review of the application before the Board.

The Board has the authority to grant licenses for the operation of for-hire motor transportation. Such licenses may be for general service throughout the province, for specified routes, or between specified points. The route may be regular or irregular. The Board may determine the commodities to be carried, and impose such other conditions as it sees fit.

Written application must be made for a license, giving the information requested by the Board. The applicant is required to complete the appended Application Form 100. In addition, he must provide a copy of his up-to-date financial statement, a proposed schedule of rates, evidence of public liability, property damage, and cargo insurance. This latter is accomplished by having the insurer complete the Certificate of Insurance Form 110 which is appended to the application. In addition, as of the summer of 1980, there is a filing fee of $30.00.

Once the application is received, the Board is required, under Section 4(2) of the Act to fix the time and place of the hearing, and have notice of the hearing published in the Royal Gazette and other such newspapers as the Board shall determine. Publication must be not less than 21 clear days prior to the date of the hearing. The only exception to the hearing process is with regards to the granting of a furniture license. In this case, the hearing may be waived if the Board is satisfied that the applicant meets all of the requirements of the Act, and no objections are forthcoming after publication of the application in two successive issues of the Royal Gazette.

Anyone may appear at the hearing in opposition to the application, provided that both the Board and the applicant have been informed of the objections in writing at least seven clear days prior to the hearing.

The Board is provided with specific guidelines as to the relevant considerations it must review before granting a license. Subsection 4(5) of the Act specifies that:

> In determining whether or not a license shall be granted, the Board shall give consideration to the transportation service being furnished by any railroad or licensed motor carrier, the likelihood of the proposed service being permanent and continuous throughout the period of the year that the highways are open to travel and the effect that the proposed service may have upon other transportation services.

The Board must also satisfy itself that the applicant will provide proper service, and that the public convenience and necessity will be promoted by the proposed service or any part of it. If the Board finds that this is the case, a license may be granted. There are a variety of license categories. There is a General License which authorizes the transportation of general freight. Secondly, there is a Contract License. Contract carriers are limited to dealing with three firms or individuals whose names must be specified in the order granting the authorization. The license is valid for the duration of the contract(s), copies of which must be filed with the Secretary to the Board. Thirdly, there is a Furniture License, fourthly, a Haulaway License which authorizes the movement of vehicles - highway, water or air. Fifthly, there is a Tractor License which authorizes the operation of truck-tractor by lease or hire. Finally, there is a Special License which authorizes the Secretary to permit the transportation of goods not otherwise covered in the regulations.

Subsection 4(7) of the Act allows the Board, the Chairman, the Secretary or the Assistant Secretary to grant temporary operating authority in cases of extreme necessity or emergency. The duration of these temporary licenses must not exceed 30 days. Subsection 4(8) allows the Board to designate any route or part thereof to be a regular route. This is accomplished by publication of the fact in the Royal Gazette and such other newspapers as the Board may determine. Within 30 days of such publication, at the direction of the Board, all carriers serving such routes shall file a timetable or schedule of trips over the route. Where a carrier does not adhere to such a timetable, the Board may, on not less than ten days notice of hearing, revoke, alter or amend the license of the carrier so defaulting. Contract carriers and those carriers whose license are restricted to specific commodities are excluded from this provision of the Act.

Under Subsection 5(1), the Board may award costs against an applicant, or against any individual who gave notice of intention to appear in opposition who did not appear and did not seek postponement of the hearing. The Lieutenant-Governor-in-Council may prescribe a table of such costs. Such costs can be recovered in any court of competent jurisdiction.

The Board may not grant a license unless the appropriate certificate of insurance is filed with it. In the case of for-hire trucking, changes in the insurance requirement are, according to representatives of the New Brunswick Department of Transportation, forthcoming in the immediate future. The objective of the changes is to simplify the insurance requirements.

Section 7 of the Act deals with license cancellations and suspensions. Any license not exercised within a period of 30 days may be cancelled. The Board may at any time, and for good cause, review and suspend any license. In addition, after giving ten days notice, and affording the licensee an opportunity to be heard, the Board may alter, amend, or revoke any license. Where it is determined that a licensee is not providing proper service, he must be given the opportunity, not less than 20 days, to provide such service. If he does not, the license may be cancelled, revoked, or given to another carrier. Subsection 7(4) appears to give the Board considerable power, and raises certain legal questions. It states:

> Where the Board considers that a certain route should be extended, it may notify the licensee of that route to apply within thirty days for a new license covering the present route and the proposed extension; failing which application the Board is empowered to consider other applications and to grant a license covering the present route and its extension, and also to cancel the license now in force in respect to the present route.

This section will be discussed later in the chapter. Subsection 7(5) allows the Board to obtain such information as it wishes relating to the operation of a motor carrier service.

Section 8 deals with exit control, stating that service shall not be abandoned or discontinued without a Board order which may be issued only after a hearing. Section 9 allows the Chief Highway Engineer of the province to order the immediate discontinuance of any service to protect the highway. Section 10 provides that licenses may not be sold, leased, transferred, delegated or assigned without application to the Board and approval following a hearing. The only exception to this is the case of an unincorporated licensee who becomes incorporated where such incorporation does not involve change in ownership. Section 11 gives the Board power to require disclosure of ownership and control, as well as information concerning subsidiaries and affiliates of the licensee and any interests he might have in other motor carriers.

Exemptions from the provisions of the Act are contained in Section 13. The following are exempt:

(1) vehicles used to transport school children under the Schools Act.

(2) vehicles carrying mail as the only cargo.

(3) vehicles carrying passengers to or from trips, ships or boats where the distance is less than ten miles.

(4) taxicabs.

(5) vehicles used in connection with the construction of any federal, provincial, or municipal work.

(6) vehicles used in the transportation of earth, sand or gravel.

(7) vehicles carrying salt to be used on a public highway.

(8) vehicles used exclusively in the transportation of:

  (a) unprocessed farm products produced in the farming operations of the owner of such vehicle to the first place of trans-shipment or market;

  (b) unprocessed sea products caught, taken or produced by the owner of such a motor vehicle from the place of production to market or the first point of transshipment;

  (c) unprocessed trees, logs, pulpwood, pitprops, poles or similar forest products; and

  (d) mineral ore from a mine to a processing plant or to the first place of transshipment.

(9) a vehicle that is owned or used by or for a farmer, fisherman, or lumberman and normally used for one or more of the purposes set out in paragraph 8.

(10) a vehicle that is used from time to time by a farmer, fisherman, or lumberman or a person hired by such farmer, fisherman, or lumberman to haul commodities for compensation.

(11) a vehicle that is used for the transportation of commodities bona fide and exclusively the property of the owner of the motor vehicle.

The Board is empowered to declare any incorporated municipality and a contiguous area extending not more than 35 miles from the boundaries of such area to be an exempt area upon such terms and conditions as the Board determines. Such an exemption may be cancelled at any time by the Board. Finally, under Subsection 13(4) the Board is given the authority to exempt any other motor vehicle from the provisions of the Act, either in whole or in part.

Under Section 14 of the Act, with the approval of the Lieutenant-Governor-in-Council, the council of a municipality may make by-laws concerning the operation of trucks and buses within their boundaries. Under Subsection 14(3), however, they are precluded from interfering with operations under a license granted by the Motor Carrier Board.

Section 16 permits the Minister, that is the provincial Secretary in the past, presumably now the Minister of Transportation, to appoint inspectors. Such inspectors are under the jurisdiction of the Board and are to enforce the provisions of the Act and regulations. They may be given such other duties as the Minister may prescribe.

Section 17 of the Act empowered the Board to make a variety of regulations. These involve the forms to be used, acquisition of data, prescription of forms of accounting and records, establishing classifications of carriers, prescribing the term or duration of licenses, prescribing fees, respecting schedules and services, rates, fares and charges of licensed motor carriers, respecting the qualification of drivers, respecting safety, and prescribing the practices and procedures within all matters within its jurisdiction. All regulations must be approved by the Lieutenant-Governor-in-Council. Finally, the regulations may apply to all cases, to any case or class of cases, or to any particular district, or to any person or service.

Section 18 provides that the orders and decisions of the Board are to be written, and become effective only five days after the mailing of the same to the appropriate carrier(s). Section 19 deals with appeals. Appeals are to the Court of Appeals from any ruling order or decision of the Board involving any question as to its jurisdiction or any question of law. Section 20 deals with offenses and fines, the latter of which are presently under review and will be changed in the near future. Section 21 provides for a voluntary fine.

Section 22 states that licensed motor carriers are deemed to be public utilities under the Public Utilities Act. Section 23 states that this Act shall be deemed to be in addition to the provisions of the Motor Vehicle Act.

As implied above, rate regulation in New Brunswick is accomplished through the regulations issued by the Board rather than by statutory provision. Regulation 49(1) states that carriers shall not charge rates other than those which have been accepted for filing by the Board not later than 15 days after their effective date. This is the only mention made of truck rates in the Regulations.

The Regulations also specify the forms to be used. Copies of these are appended. In addition, the uniform bill of lading is described in detail and a copy is appended.

There are several safety regulations which should be noted. Regulation 14(1) provides that both trucks and buses shall be maintained in a safe and sanitary condition at all times, and are at all times subject to inspection by the Board or persons appointed by it. Regulation 15 provides for a minimum age (eighteen) for bus drivers, but does not mention trucks. Bus drivers, though not truck drivers, are required to undergo an annual medical and visual checkup (Section 16). Regulation 17 provides that bus drivers may not work more than ten hours in any sixteen hour period except in emergencies. Regulation 20 requires all licensees to report to the Board the misconduct or general failure of a driver to comply with the Act or Regulations, or the incompetency or unfitness of such a driver. Regulation 21 states that the continued employment of incompetent or unfit drivers shall be grounds for the suspension or revocation of the motor carrier license. Regulation 29 requires that all drivers of both trucks and buses falling under the Act test the brakes, lights and doors before operating the vehicle on a public highway. All trucks are required to carry on board an approved fire extinguisher under Regulation 30. Regulation 34 provides for a separation of 100 feet between a public motor bus or truck except in the case of passing. Regulation 35 provides that drivers involved in an accident shall obtain the names and addresses of those involved and forward the same to the Board or his employer as the case may be. Regulation 44 provides for the use of the uniform bill of lading.

Regulation 46 deals with the transportation of hazardous goods. Inflammable substances, explosives or other dangerous articles are not to be transported according to Subsection 46(1). However, under Subsection 46(2) the Secretary of the Board is permitted to issue a special license for the transportation of these goods:

> upon conclusive evidence that the applicant is conversant with the law and regulations concerning the transportation and storage of dangerous articles.

Regulation 48 deals with insurance coverage for licensed motor trucks. It specifies PL and PD coverage of not less than $100 000. Regulation 48(2) provides that inland transportation insurance shall be fixed from time to time by the Secretary in the case of each motor carrier, the amount to be based upon the average cargo carried, against loss or damage to cargo.

With this information as background, the law reform paper on the Motor Carrier Board will be reviewed in the following section of the chapter.

5.3 Review of Selected Literature Pertaining to the New Brunswick Motor Carrier Board

This section reviews work completed by others related to the operation of the New Brunswick Motor Carrier Board. These include "The Motor Carrier Board" and "The Public Utilities Board Study", both completed by the New Brunswick Law Reform Commission, and a Ministry of Transport study, "Competition and Regulation in the Trucking Industry".

5.3.1 The Motor Carrier Board Study

As part of a broader research program, the New Brunswick Law Reform Commission examined the Motor Carrier Board. It focused on the jurisdiction, the composition, and the procedures of the Board. This review will follow the framework of the Report, and will be limited to a presentation of its analysis and findings. Information is presented only where it complements the details of the Act and Regulations set out previously in this chapter.

The Commission Report notes that the Board has authority over intraprovincial for-hire trucking, and has been delegated authority to regulate extraprovincial trucking by the Motor Vehicle Transport Act (MVTA). It notes, however, that the delegation is not absolute, and that "the federal government has retained the power to intervene" (page 7). Three areas of possible intervention are mentioned. The Governor-in-Council has the power to exempt all or part of extraprovincial operations from the provisions of the MVTA. In the second place, the CTC issues permits for truck transport on Sunday under the provisions of the Lord's Day Act. And finally, under Section 27 of the National Transportation Act, motor carriers under federal jurisdiction must notify the CTC of any proposed acquisitions of a motor carrier.

Within the province of New Brunswick, there is divided jurisdiction. Licensed motor carriers are public utilities. However, according to the Law Reform Commission Study, the Board of Commissioners of Public Utilities has not been actively involved with the motor carrier industry. The Study notes that the matter is "further complicated by cross-appointments to both tribunals" (page 10).

The power of the Board to exempt certain areas from the Act has been noted in the previous section of the chapter. The Law Reform Commission Study states that six areas have to date been exempted: Fredericton, Saint John, Moncton, Chatham-Newcastle, Campbellton-Atholville and Bathurst. With reference to the exemptions, the Commission Study states:

> In order to exempt a region, there appears to be no necessity for a hearing. When the last exemption order was issued in 1963, the Board made the declaration designating the six exempt areas. To date the description of the exempted territory has not been updated nor have there been any conditions invoked (page 15).

The Motor Carrier Board has seven members who are also Commissioners of Public Utilities. In addition, the Registrar of Motor Vehicles sits on the Board. Only the Chairman of the Board is appointed full time, but even this is misleading as he has two other acts to administer, and is therefore required to allocate his time among the three positions. There are no conflict of interest provisions in the legislation. The Law Reform Commission Study states that:

> In the past, two of the members appeared frequently as Counsel before the Board. On occasion, these members have heard applications presented by their former clients. When asked whether this background or familiarity raised a conflict, the members generally responded that the conflict was questionable, and as yet, there had been no objections raised by the applicants as to the likelihood of a conflict (page 21).

There are no qualifications for membership on the Board set out. Generally, the chairman and at least one other member are lawyers. The chairman and the secretary receive a full-time salary as determined by the Lieutenant-Governor-in-Council. Other members are paid a part-time salary plus expenses. The chairman and secretary, in practice, have been delegated a significant level of authority by the Board.

The Board has a staff of five members, appointed under the Civil Service Act. The assistant secretary appears to be the most active staff member. He does what the Board delegates to him, having the general power to do anything the Board is authorized "to do" and in emergency situations . . . grant temporary "authorities" (page 25). There is no research capability. The Board does not appear to utilize outside experts in dealing with the cases before it.

Turning to procedures, one finds that the Board is required to hold a hearing on all license applications except for the furniture exemption noted earlier. The pre-hearing procedures are carried out by the chairman, secretary and staff. In addition to the requirements stated earlier, there are no more which need to be noted here. For extraprovincial applications, the Board requires a copy of the carrier's home jurisdiction operating authority. In fact, this is required despite the fact that:

> This documentation is not required by statute or by the regulations. However, the Board has ruled that unless the applicant has authority to move passengers or commodities, out of the home province, the Board will not consider an application requesting entrance into New Brunswick (page 28).

According to the Law Reform Commission Study, where an applicant does not possess such operating authority frequently an application for temporary operating authority in New Brunswick is made. In addition, the assistant secretary reviews the file before a hearing and works with the applicant to minimize the technical deficiencies in the application.

The time requirements involved in a license application have been noted above. These are adhered to stringently. Furthermore, the parties are given no opportunity to justify late filings (page 31). The New Brunswick Court of Appeal has supported the Board in this strict application of the timeliness of objections.

The hearing itself is adversarial in nature. Slightly less than half of the applicants have legal counsel present. The Board suggests that the applicant have a lawyer present in cases where there are objections. Possibly this is because objectors typically bring lawyers with them. The initial step in the hearing is to deal with preliminary motions. In the hearing itself, the rules of evidence are not strictly applied (page 33). There is the opportunity for cross-examination of witnesses. The Board requires the presence of the applicant, and usually asks that he bring supporting witnesses who are users to present information relative to the demand for the service. The Study notes that:

> there has been an escalation in the number of witnesses provided by the applicant, and it is not uncommon to call three or four witnesses (page 33).

Letters of support are acceptable, but appear to be given little weight. The hearings center around the factors that the Board is required to consider, and the applicant attempts to show that existing carriers are not providing a sufficiently high quality of service.

The Law Reform Commission Study states that in 1979, approximately a third of the applications had objections filed. Large carriers object, apparently, only when faced with a definite threat. Small carriers, on the other hand, 'may appear regularly with the intent of impressing upon the Board the limited market' (page 34). Usually lawyers attempt to "settle" the conflict at pre-hearing conferences and then withdraw the objection (page 35). Somewhat surprisingly, the objector plays a significant role in the hearings. The Board:

> requires only limited filings and as the Board relies primarily on the evidence presented during the hearing, the objectors raise relevant arguments concerning the carrier's financial status, capacity and necessity for the service (page 36).

The hearings are recorded, but transcripts are prepared only if there is to be an appeal or if the case is difficult. All hearings are public hearings.

Decisions may be rendered immediately or may be reserved. In the case of the latter, the decision may be rendered later in the current hearing (which lasts three days) or set over to the next monthly hearing. With regard to its decisions, generally speaking:

> a decision will not be rendered until the members have reached a consensus or a compromise. If there are differences, the decision will remain pending until agreement has been reached. No dissenting opinions are recorded (page 38).

The Law Reform Commission Study devotes considerable attention to the question of public interest, and its findings in this area should be reviewed as well. The Study (page 51) states that each application is evaluated individually, and a balance struck between the interests of those involved, and the public interest. With respect to new applications, the Study states that "it is hard .... to determine whether the public interest is properly being considered" (page 52). The difficulty is with the availability of information. With regard to abandonment applications, "there are no statutory guidelines specified" and "the Board exercises its own discretion when weighing public interest" (page 52).

5.3.2 The Public Utilities Board Study

It has been noted that all motor carriers (public) are public utilities under the New Brunswick legislation. It is, therefore, necessary to review the second Law Reform Commission Study to extract its findings on the industry. This review will be relatively brief, given that the Public Utilities Commission has not played an active role in the regulation of public motor transport. The cross-appointments between the Public Utilities Commission and the Motor Carrier Board have already been noted. Like the Motor Carrier Act, the Public Utilities Act contains no provision with respect to conflict of interest. Like the Motor Carrier Board, there is no in-house research capability. Unlike the Motor Carrier Board, however, the Public Utilities Commission has sought expert advice in the past.

The Public Utilities Act prohibits the charging of unreasonable or discriminatory rates. It is doubtful that this section of the Act could be made to apply to motor carriers, because available judicial interpretation is that the two acts are not to be taken together.

No other parts of this extensive study appear to be relevant to the present discussion.

5.3.3 The Ministry of Transport Study

Having examined the Motor Carrier Act and Regulations for the province of New Brunswick, and the work of the Law Reform Commission, it remains to consider the federal study. To avoid the dangers of repetition, only those comments which expand upon the earlier material will be considered here.

The study noted the attempt to make the Motor Carrier Legislation across the Atlantic Provinces uniform in nature. This must be regarded as a positive step. It also raises the possibility that rate control could be reinforced by regulations issued by the Board. It also suggests that the presence of the Atlantic Region Freight Assistance Act promotes adherence to the published rates (page 49).

All other points raised in this study have been covered in the above sections of this chapter of the report.

5.4 Observations on the Legislation and Operations

This section considers two parts of the Act, one in force, the other which must be regarded as forthcoming. It will also look at the record of the Board in dealing with applications before it.

One section of the Act which causes the present authors some considerable concern is Subsection 7(4) which deals with the extension of a route presently served by a carrier. As pointed out in the legislation review, the Board has the authority to require a carrier to extend his route into an area not presently served, and in the event of the failure of a carrier to comply, to give the route to another carrier, cancelling the operating authority of the existing carrier on the route. It is not known whether this part of the Act has been used in practice.

The difficulty with the provision is that, in forcing the extension by a carrier into a new area of operations, the Board may be acting in a confiscatory manner. That is, since the route in question is most likely to be unprofitable if considered as a separate route, it may, in fact, be taking action which involves the expropriation of property without due process of law in respect to the original route. In the case of the United States, there have been instances where railroads were ordered to annex an extension of a route; the courts subsequently ruled that the regulatory body did not have the authority to make such rulings. There have been no court cases in New Brunswick concerning this issue, but the potential exists.

The authors of the study have been told that some changes to the Motor Carrier Act for New Brunswick are planned. Among these, apparently, is one which would exclude the small carrier, operating one or two straight trucks, from the necessity of obtaining a motor carrier license despite the fact that the operator would be engaging in public trucking. Such action would make the New Brunswick legislation more in line with the Nova Scotia legislation where such provision has been in place for some time. It would also result in the duties of the Motor Carrier Board being simplified, for it would reduce the number of required hearings.

The major difficulty is that, for all practical purposes, at least in the long-run, this move would effectively destroy the control of entry into the industry. It might also have other adverse impacts on the existing industry. Both of these require some explanation.

Turning to the first, the proposal would remove all entry control for small carriers previously described. Small operators would be free to enter, and presumably would do so only on profitable routes. The exemption would allow their operation, and permit them to build up a clientele over a period of time. Having this base, these carriers could then approach the Board seeking a motor carrier license. Given their existence, the adverse impact on existing carriers on the route would be less than otherwise, and they would already have a proven market for their services, so that the public interest part of the application would most probably already be proven. It appears that, in this situation, the Board would have a most difficult time denying the application. In this fashion, effective entry control could be abolished.

Equally serious is the second possible impact. There exists the possibility that these new carriers would seek only the most profitable markets, leaving the less profitable ones for the licensed carriers. The latter group, under the legislation, cannot abandon routes without a formal hearing process where their interests must be weighed against the public interest. Overall, the impact of the proposed change would seem to be to reduce the amount of money which the licensed carriers have to cross-subsidize their less profitable routes. The impacts upon the licensed carriers would have to be assessed before such changes were legislated.

If changes in entry control are sought, then it would appear to be preferable to deregulate entry and exit completely. This is the case because its impact is easier to assess. On routes with higher levels of traffic, the impact of complete deregulation would be a fall in rate levels coupled with better service. On the less dense routes, the impact would be a rise in rates and a probable decline in service quality. The proposed changes appear to be an untenable half-way house between regulation and deregulation.

The decisions of the Board for the past five years for which data are available are shown in Table 5.1. The table indicates that the number of applications fluctuates considerably from year to year, but that generally, the work load of the Board is increasing. As one would expect from the number of applications, the number of motor carrier plates issued has been rising, despite the number of license cancellations shown for the last two years.

Table 5.1

DISPOSITION OF CASES BEFORE THE N.B. MOTOR CARRIER BOARD -
1975-76 to 1979-80

Item	1975-76	1976-77	1977-78	1978-79	1979-80
Applications	187	251	214	230	241
Opposed	62	71	72	79	86
Granted	142	188	154	179	195
Other Disposition	45	63	60	51	46
Cancelled	N/A	N/A	N/A	112	131
Temporary Lic.	3 023	2 891	2 070	2 115	1 880
M.C. Plates Issued	4 883	5 208	5 656	5 742	5 798

Note: "Other Disposition" means withdrawn, set over to a later date, or refused.

Source: Annual Report, Carrier Board, various years.

The data indicate that a high percentage of applications receive approval. Over the period under review, approvals ranges from 72.4% (1977-78) to 80.9% (1979-80). For the five year period, the approvals averaged 76.5% of applications. Unfortunately, data are not available which would permit a breakdown of the not-approved category into its constituent parts - withdrawn, set over and refused. Nor is it possible to divide up the data according to class of license applied for.

These approval percentages may be compared with those of the province of Québec where control is stricter. In 1977-78, for example, 51.2% of the applications for general permits in that province were either denied or withdrawn. In the case of specialty permits, the figures were 21.8%. This comparison leads one to the conclusion that entry control is considerably less stringent in the case of New Brunswick.

The table also indicates that the number of temporary permits issued in the province of New Brunswick has been steadily falling. Discussions with representatives of both the provincial government and Atlantic Provinces Truckers Association indicate both are concerned with the trend, and both feel that the amount of illegal trucking could be on the increase. The decline is explained then by the fact that such trucking operations are not obtaining temporary permits, not because it is a less common occurrence. The difficulty is, apparently, that the fine for failure to obtain the permit is less than the cost of the permit. Officials of the Department of Transportation state that this situation will be altered in the immediate future.

Data on the number of objectors for individual applications are not available. There appears to be a relationship between the number of applications and the number of objectors, but this cannot be documented. The 1976-1977 Report of the Board notes that in one case before it that year, there were eight objections. In the Report for the year 1979-80, the Board notes that there has been an increase in the number of objections in the last two years, but offers no other information.

The lack of research capability of the Board has been noted. With an increasing number of objections forthcoming, it appears that if entry control is to continue in the province of New Brunswick, then the Board will require a research component. Furthermore, as has been noted elsewhere in the report, the lack of data relative to the industry is lamentable. For example, commodity flow data, which can be regarded as trustworthy, is lacking. A research wing of the Board could rectify this, and perform other useful functions as well. It has been recommended elsewhere that a waybill analysis be started for motor transport. The provincial Department of Transportation has stated it does not plan to enter into this activity at this time. This means that, if it is to be instituted in New Brunswick, it must be done by the Motor Carrier Board.

5.5 Summary and Conclusions

This chapter of the report has examined the Motor Carrier Act and Regulations, the procedures of the Board, and some aspects of the operation of the Board.

The chapter began with a review of the legislation to determine the overall framework within which regulation takes place. It found that despite the fact that motor carriers are public utilities, in practice, the Public Utilities Act has little relevance to the industry. There are seven members of the Board plus the Registrar of motor vehicles. Most of the work appears to be completed by the chairman, the secretary and the assistant secretary.

All public motor carrier operations must be licensed unless specifically exempted from the provisions of the Act. The licenses can be for general operation, or restricted to specific routes or points. The Board has the authority to attach conditions to licenses.

With the exception of furniture license applications to which there are no objections, hearings are mandatory. It appears that the hearing exemption should be extended to cover all applications where there are no objections. In deciding whether to grant a license, the Board must weigh the public interest against the impact on existing carriers. No general rules exist here, the Board decides each case on its own merits. A variety of licenses exist, ranging from general to specific commodity licenses such as a haulaway license.

The officers of the Board have wide powers, being able to do anything that the Board may do. In some instances, this authority carries on only to the next Board meeting. There are provisions for license cancellations and suspensions, and these require a hearing as well. There is exit control, but formally, at least, this appears to be exercised only with respect to bus transport.

The only rate regulation is the requirement to file rates. Appeals from Board decisions are to the Court of Appeals, and are on questions of jurisdiction or law. Such safety related provisions as exist are handled by regulation as opposed to legislation.

One section of the legislation which causes concern is that related to the ability of the Board to force carriers to serve new areas and to impose penalties, including cancelling the carriers license, for non-compliance. The question of the confiscatory nature of the provision was raised, but no final judgement is possible. This would require a court decision.

The proposed exemption of very small carriers from the provisions of the Act was noted. Despite the fact that this would ease the workload of the Board, it should not be implemented without detailed study because of the long-run difficulties which it could cause. It would be better to abolish entry-exit control altogether, for the impacts of this step, at least, are more certain.

A review of the decisions of the Board during the past five years reveals that a high percentage of applications are approved. Ideally, one would want to consider this question from the point of view of type of license, and also whether intra as opposed to extraprovincial authority is sought. However, these data are apparently not available for the province of New Brunswick. The number of temporary permits has been falling. This is partially explained by the low level of fines involved in not obtaining such a permit. This situation is to be rectified in the near future.

The lack of research capability on the part of the Board was noted. In at least two situations, this needs to be strengthened. It is necessary because of the rising number of objections to applications. It is also required because of the lack of reliable data concerning commodity flows inside the province and to external points. This is a general complaint in Canada and, in view of the importance of the industry, action is required.

Chapter 6

ECONOMIC PERFORMANCE OF THE INDUSTRY

6.1 Introduction

An examination of the economic performance of the trucking industry domiciled in the province of New Brunswick is reported in this section. It begins with the consideration of some approximate productivity measures that should provide an indication of the efficiency of the New Brunswick industry relative to other jurisdictions and the industry on a national scale. A second approach considers economic performance as measured by a number of financial ratios. Comparisons of these ratios are made with data from other jurisdictions. Finally, a summary of the conclusions drawn from this analysis is presented.

6.2 Approximate Productivity Measures

Data which provide an indication of the productivity of the trucking industry for 1975 are presented in Table 6.2.1 for New Brunswick, Canada and other selected provinces. These measures include: revenue per employee; revenue per dollar of assets; revenue per dollar of employee compensation; and (for 1976) revenue per mile. A background discussion is presented before the data are considered.

As a result of some difficulties with the reported mileage figures published by Statistics Canada, the 1976 data were substituted in order to achieve a longitudinal comparison. Secondly, care must be taken in making comparisons involving any given ratio between provinces, or even among classes. This occurs because of the differing cost structures of the segments of the industry, and in particular, because of the differing role played by the broker operator across the country and within the classes. It has not been possible to make adjustments to the data to eliminate these differences.

The first measure considered was revenue per employee. For the Class I trucking firms, in 1975, New Brunswick had the highest revenue per employee. Of the jurisdictions compared, Alberta ranked second. This measure, again among those provinces considered, was the lowest in the province of Québec. Ontario, like Québec, had revenue per employee values below the national average. The New Brunswick value was 62.5% above the Canadian average whereas Québec was 16.0% below. Among other factors, these data reflect the difference in the importance of the broker operations. It will be recalled that in New Brunswick, in 1975, the broker accounted for 40.8% of total operating costs, while nationally, the equivalent figure was only 10.9%. In the case of Class II operations, Alberta has the highest value of revenue per employee, being 33% above the national average. Ontario also has a value above the Canadian average, while New Brunswick

Table 6.2.1

MOTOR CARRIERS FREIGHT: SELECTED PRODUCTIVITY MEASURES, CANADA AND SELECTED PROVINCES - 1975

Class	Revenue/ Employee (thousand $)	Revenue/ Dollar of Assets ($)	Revenue/ Dollar Employee Comp. ($)	Revenue/* Mile ($)
Class I				
P.E.I.	-	-	-	-
N.B.	52.219	1.84	5.55	4.08
Québec	27.189	1.30	2.32	1.55
Ontario	30.991	1.55	2.39	1.92
Alberta	44.387	1.67	3.57	1.91
Canada	32.129	1.55	2.54	1.91
Class II				
P.E.I.	24.740	1.19	2.93	- (1)
N.B.	32.733	1.86	3.44	1.24
Québec	28.036	1.74	2.55	1.29
Ontario	34.234	1.70	2.88	1.14
Alberta	44.579	2.04	3.52	1.32
Canada	33.556	1.81	2.91	1.27
Class III				
P.E.I.	24.087	1.67	2.87	0.98
N.B.	29.506	1.62	3.34	0.97
Québec	25.591	1.46	2.82	1.03
Ontario	28.348	1.59	2.90	0.95
Alberta	33.707	1.59	3.34	1.19
Canada	28.272	1.52	2.94	1.04
All Classes				
P.E.I.	24.250	1.52	2.88	-
N.B.	39.374	1.80	4.22	1.84
Québec	27.078	1.45	2.49	1.33
Ontario	31.149	1.58	2.52	1.57
Alberta	41.596	1.74	3.51	1.53
Canada	31.647	1.59	2.68	1.53

* 1976, see text.

(1) Revenue for this class not published separately.

Source: Calculated from data presented in Motor Carriers - Freight and Household Goods Movers, Statistics Canada, 1975.

lies somewhat below with the Québec segment of the industry having a value even lower than that found in New Brunswick. Factors other than payments to brokers are apparently important here, for New Brunswick payments are more than 50% higher than those at the national level when considered as a fraction of total operating costs. For Class III operations, Alberta again leads, with both New Brunswick and Ontario above the national average. When the industry is considered as a whole, Alberta has the highest revenue per employee, followed by New Brunswick, with both values being substantially above the national average. Ontario is slightly below the national average, and the Québec value is approximately 14% below.

The second measure considered was the revenue to dollar of assets ratio. This is the ratio of output to capital. The data, in the case of Class I trucking operations, mirror the discussion reported above. New Brunswick leads, followed by Alberta, with both jurisdictions having values above the national average. Ontario is just at the national average, with Québec being substantially below. In Class II operations, Alberta leads, followed by New Brunswick with both having values above the Canadian figure. In the case of New Brunswick, the value lay just above the national average. The Ontario situation is also reversed with the industry achieving a value just below Québec relative to this measure. The Prince Edward Island segment of the industry achieve a value of the revenue to dollar of assets ratio that is significantly below the national average.

In the case of Class III firms, there are major differences between the two measures presented. In all provinces used for comparison, with the exception of Québec, the average is above the national figure. Overall, New Brunswick has the highest output-capital ratio, and therefore the lowest capital-output ratio. New Brunswick and Alberta have values above the national average. Of those listed, Québec has the lowest output-capital ratio, and therefore the highest capital-output ratio. The Québec results, as in the case of Alberta, could be predicted from the theory of regulation.

The third measure, revenue per dollar of employee compensation, can be considered as another measure of labour productivity. It is different from the first in that it allows for wage differentials related to productivity differentials among various sub-groups of the total industry. In the case of Class I firms, the New Brunswick average is more than twice the national average. Alberta also lies above the national value, with Ontario and Québec falling below. In Class II operations, Alberta leads, with New Brunswick a close second. Prince Edward Island also has a value above the national average. Ontario and Québec, in that order, have values below the national average. New Brunswick and Alberta have the same average in Class III, and both have values above the Canadian figure. Ontario, Prince Edward Island and Québec, again in order, fall below the average figure. Overall, New Brunswick has the highest productivity of the wage dollar, followed by Alberta and Prince Edward Island, all having values above the national average. Ontario is below, and again, the ratio for those compared is lowest in the province of Québec. The differences among provinces and classes can be partially explained by the role of the broker. Use of the broker operation allows firms to externalize some of their labour costs, and thereby lead to a higher average when this measure of productivity is used.

The final comparative measure considered was the average revenue per mile operated. As in the cases above, care must be taken in interpreting these data. The revenue measure includes revenues earned by trucks owned and leased by the firms as well as the revenue earned by brokers employed by the firms. The mileage figures, however, include only the mileage of the trucks operated by the firms - that is, those owned or leased. There are no mileage data available for the broker operations. The average revenue per mile data are, therefore, biased by the underestimation of the total mileage involved. This situation further restricts meaningful use of much of the Statistics Canada data. The comparisons presented in the following paragraphs mirror the differences in the data base.

Examination of the average revenue per mile figures for Class I operations reveals that New Brunswick has the highest value of those presented, and is more than twice as large as the second ranked province. Ontario and Alberta are clustered around the Canadian average, while Québec is substantially below that level. Part of the difference is explained by the broker operations, but it also appears (although data are not available to confirm this) that the product mix carried could be a factor.

The Class II pattern is quite different, with the Alberta segment of the industry having the highest average among the jurisdictions considered. Québec is second, and is above the Canadian average. The New Brunswick trucking industry is below the national figure as is the case in Ontario.

In Class III operations, Alberta again leads, and is the only jurisdiction listed which exceeds the national average. Québec is marginally below, and is followed by Prince Edward Island, New Brunswick, and Ontario, in that order. When all classes combined are considered, clearly because of the Class I situation, New Brunswick leads, with that province and Ontario being above the national average. The Alberta figure is the same as the Canadian average while the Québec average is considerably below.

On the basis of the data available, it can be concluded that the New Brunswick industry compares favourably with that in other parts of the country. Such a conclusion must be regarded as highly tentative in the absence of better information concerning the precise role of the broker. This entity does distort the results, though it is impossible to determine the extent of that distortion.

The previous reported analysis was repeated for the year 1978, and the data from that analysis are shown in Table 6.2.2. In general, it can be said that, with regard to Class I firms, New Brunswick domiciled carriers performed better than the national average in 1978 as they had done in 1975. New Brunswick domiciled firms in the Class I group did less well when compared with the industry in Alberta, but better than the national average. The Class III situation was similar to that found in Class II.

Considering the 1978 data in detail, the initial measure employed was revenue per employee. With regard to Class I firms, the New Brunswick sector of the industry had an average value 48% higher than the measure for the total Canadian industry and was approached only by Alberta among those

Table 6.2.2

MOTOR CARRIERS FREIGHT: SELECTED PRODUCTIVITY MEASURES, CANADA AND SELECTED PROVINCES - 1978

Class	Revenue/ Employee (thousand $)	Revenue/ Dollar of Assets ($)	Revenue/ Dollar Employee Comp. ($)	Revenue/ Mile ($)
Class I				
P.E.I.	-	-	-	-
N.B.	64.149	2.49	4.80	5.29
Québec	35.651	1.71	2.21	2.30
Ontario	49.156	1.70	2.49	2.29
Alberta	62.842	1.71	3.50	2.77
Canada	43.511	1.75	2.59	2.45
Class II				
P.E.I.	49.618	1.97	4.40	1.46
N.B.	48.985	2.09	3.80	1.64
Québec	38.955	1.52	2.68	1.55
Ontario	42.173	1.65	2.86	1.51
Alberta	54.942	2.50	3.39	1.72
Canada	44.324	1.73	2.97	1.64
Class III				
P.E.I.	35.007	1.57	3.66	0.93
N.B.	40.050	2.22	3.73	1.04
Québec	35.721	1.61	3.03	1.30
Ontario	35.733	1.83	3.14	1.30
Alberta	42.860	1.69	3.47	1.44
Canada	37.929	1.76	3.20	1.32
All Classes				
P.E.I.	39.856	1.72	3.94	1.37
N.B.	54.262	2.35	4.34	2.47
Québec	36.294	1.65	2.41	1.88
Ontario	41.031	1.70	2.60	1.97
Alberta	55.612	1.85	3.47	2.09
Canada	42.596	1.75	2.74	2.00

Source: Calculated from data presented in Motor Carriers - Freight and Household Goods Movers, Statistics Canada, 1978.

considered. Ontario was also above the national average, with the Québec sector falling below. For Class II operations, New Brunswick ranked behind Alberta and Prince Edward Island, with all three being considerably above the national average. Both the Québec and Ontario segments of the industry were below the national average. In Class III firms, the New Brunswick average was about 5% below Alberta's, both being above the national figure. The other three provinces considered all fell below the national average. Overall, New Brunswick had a marginally lower average of revenue per employee in 1978 than did Alberta. Both were substantially above the Canadian figure. Québec was the lowest of those considered.

The second measure employed was the revenue per dollar of assets. For Class I carriers, New Brunswick was substantially above the Canadian average, there being no significant difference among the other three provinces examined. Alberta led in this measure for Class II carriers, with New Brunswick second among those considered. Ontario and Québec were again below the national average. New Brunswick carriers led the Class III firms, followed by Ontario. Alberta was below the national average, and Québec ranked behind Alberta. For the industry as a whole, New Brunswick carriers had the highest revenue/asset ratio, followed by Alberta. Of those considered, only these two were above the Canadian average. The ranking for the other three jurisdictions considered were Prince Edward Island, Ontario and Québec. Inverted, this ratio becomes the capital-output ratio. Québec, as economic theory relative to regulation would predict, had the highest capital-output ratio. New Brunswick, rather than least-regulated Alberta, has the lowest. Again, these data must be interpreted with caution, it being impossible to make adjustments for the differing roles played by the brokers in the various provinces.

A second proxy for labour productivity, revenue per dollar of employee compensation, was also considered using the 1978 data. For Class I carriers, New Brunswick ranked highest, followed by Alberta. Only these two among the comparative group exceeded the national average. Québec was the lowest of the four provinces considered. Carriers domiciled in Prince Edward Island led the Class II carriers, with New Brunswick second, and Alberta carriers third. These three exceeded the national average, while Ontario and Québec (in that order) were below the average. In the case of Class III operations, New Brunswick led, followed by Prince Edward Island and Alberta. Québec again ranked last within the comparative group. For the industry as a whole, the order was, as in the Class III case, New Brunswick, Prince Edward Island and Alberta all being above the national average with Ontario and Québec below.

The final measure considered was average revenue per mile. As found in the analysis of the 1976 data, the New Brunswick average for Class I operations was more than twice the national average. Similarly, Alberta was found to be above the national figure, while Ontario and Québec were below. For Class II operations, Alberta was above, and New Brunswick equal to the national average. Québec was below the national figure, but higher than both Ontario and Prince Edward Island. As had been the case in 1976, the New Brunswick Class III firms were substantially below the national average. For the industry as a whole, New Brunswick had the highest average revenue per mile, being 23.5% higher than the Canadian average. Alberta was also above the average, with Ontario, Québec and Prince Edward Island, in that order, falling below.

On balance, it is possible to conclude that on the surface, the New Brunswick domiciled motor carriers compare favorably with those resident in other provinces. This conclusion must be considered carefully for there remain a number of unanswered questions, primarily those centering around the use of the broker as a substitute for the ownership of capital. Ideally, the data should be adjusted to account for this phenomenon, but data are not available to enable this adjustment being made. The broker segment is important in some parts of the country, and a high priority should be assigned to assembling data on this component of the industry at the earliest opportunity. Only when these details are available will it be possible to obtain a more accurate comparison of the industry as it functions throughout Canada. The existing data, at least in the cases of the measures employed here, tend to bias the results in favor of those provinces or classes which employ brokers extensively.

6.3 Financial Performance of the Industry

An analysis of the financial performance of the motor carrier industry domiciled in New Brunswick was completed. By way of introduction, and to provide some basis for comparison, selected corporate ratios for four sectors of the Canadian economy are shown in Table 6.3.1. These data are generated from income tax returns, and are for incorporated firms only. The sectors chosen as a basis for comparison are: truck transport; the transportation sector as a whole; the manufacturing sector; and, the total for the 182 industries included in the three groups. While data are available for a number of years, only those for 1978 were used in this analysis.

As the data contained in Table 6.3.1 indicates, truck transport has a higher ratio of fixed assets to equity than either the manufacturing sector or the industrial total. The value for truck transport is, however, lower than that for the total transport sector. In addition, the truck transport sector has a lower debt to equity ratio than either the total transport sector or the total for all industries. This ratio is higher than that found in the manufacturing sector. The same pattern emerges when interest payments as a proportion of total cost are considered. The next statistic used in the analysis was the liquidity ratio, and it is generally accepted that a ratio of one is satisfactory. The trucking sector liquidity falls below that level, while the other sectors considered exhibit values considerably above one.

When the relationship between before tax profit and three commonly employed measures is considered, the trucking sector performs better than the other three, with the total transport sector ranking last of those considered when compared against capital employed and equity. When the ratio relative to total income is employed, trucking ranks third behind the all industries category and the total transport sector. The same pattern holds when the ratio of after tax profits to the three denominators is used.

Data for the motor carrier industry, subdivided by class and by jurisdiction, relative to the first three financial ratios previously used are presented in Table 6.3.2 for the years 1975 and 1978. Data for the ratio of interest costs to total costs are not available. With the

Table 6.3.1

SELECTED FINANCIAL RATIOS FOR VARIOUS SECTORS OF CANADIAN ECONOMY - 1978
(percentages)

Ratio	Truck Transport	Transport Sector	Manufacturing Sector	Total - 182 Industries
Fixed Assets to Equity	116.1	132.1	61.0	105.4
Long Term Debt to Equity	44.9	55.1	33.4	51.2
Interest to Total Cost	1.8	3.9	1.7	2.7
Current Assets/Current Liabilities	9.0	120.0	130.0	110.0
Before Tax Profit/Capital Employed	12.3	5.6	11.0	7.6
Before Tax Profit/Equity	18.8	9.2	15.9	13.5
Before Tax Profit/Total Income	4.2	5.7	3.4	6.7
After Tax Profit/Capital Employed	9.3	4.2	8.2	5.8
After Tax Profit/Equity	14.1	6.8	11.8	10.3
After Tax Profit/Total	3.1	4.3	2.5	5.1

Source: Statistics Canada, 61-207.

Table 6.3.2

SELECTED FINANCIAL RATIOS: FOR-HIRE TRUCKING JURISDICTIONS LISTED - 1975 AND 1978

(percentages)

Category and Area	Fixed Assets / Equity		Long Term Debt / Equity		Current Assets / Current Liabilities	
	1975	1978	1975	1978	1975	1978
ALL CLASSES						
Canada - corp.	-	116.1	-	44.9	-	90.0
Canada - all	211.5	241.9	103.4	104.7	91.7	92.2
Canada - top 100	222.0	211.7	115.9	108.9	94.5	97.6
P.E.I. - all	215.4	236.8	61.8	84.5	66.8	67.9
N.B. - all	219.4	330.8	97.5	153.4	87.2	80.5
Québec - all	269.0	207.3	150.2	118.6	89.0	110.3
Ontario - all	179.0	274.6	70.5	115.5	90.9	85.3
Alberta - all	202.3	239.8	97.7	116.8	95.9	97.2
CLASS I						
Canada	219.1	218.4	114.0	113.3	95.6	96.1
New Brunswick	261.7	7 586.6	156.9	4 729.1	97.9	79.4
Québec	416.5	226.5	150.2	153.2	89.0	125.2
Ontario	179.0	205.7	70.5	88.6	90.9	85.3
Alberta	189.8	177.0	93.5	88.1	104.4	118.0
CLASS II						
Canada	202.9	188.0	85.8	78.9	93.2	88.1
P.E.I.	284.7	333.7	55.8	141.7	42.6	72.1
New Brunswick	165.1	127.8	50.7	32.6	86.5	105.9
CLASS III						
Canada	197.5	234.5	103.4	102.7	91.7	77.9
P.E.I.	186.9	209.7	64.1	68.7	82.3	64.5
New Brunswick	282.8	334.5	96.6	133.1	62.8	63.9

Source: Line 1 - Statistics Canada, 61-207. Other - Statistics Canada, 53-222.

exception of the first line in the table, all of these data have been computed from the Motor Carrier Freight publication. The industry as a whole will be considered first, then each of the three classes will be briefly discussed.

In 1975, Québec had the highest ratio of fixed assets to equity of the jurisdictions examined. Ontario was the lowest, with New Brunswick having a ratio slightly below the top 100 carriers. The New Brunswick value was for all Canadian carriers. The 1978 situation was vastly different, with New Brunswick having by far the highest ratio. The ratio for all Canadian carriers rose in the period as did the ratio for Ontario and Alberta. The Québec ratio fell as did the ratio for the top 100 (as determined by the 1975 rankings) in Canada. The debt to equity ratio in Québec was highest in 1975, with New Brunswick's significantly below the national average. In 1978, New Brunswick's ratio had increased substantially, with little change at the national level. The ratio for Québec fell sharply. For both years, with the exception of Québec in 1978, the liquidity ratio was below 100 in all jurisdictions.

The pattern was different for Class I carriers in 1975. Québec carriers had a fixed asset to equity ratio much above the national average in that year. New Brunswick carriers also had a ratio above the national value. The ratio in Ontario was the lowest. The Québec figure fell sharply during the intervening years, and the New Brunswick value rose dramatically, reflecting a disastrous year in 1977 which more than wiped out previously accumulated retained earnings. The before tax loss in New Brunswick in 1977 was $0.994 million and the after tax loss was $1.522 million. Among other factors, the loss reflected an increase of $0.688 million in legal and professional expenses between 1976 and 1977 - an increase of 71%. This loss is also reflected in the other ratios estimated. The debt to equity ratio rose sharply, and the liquidity ratio fell sharply between the two years.

There was more stability between the two years in the case of Class II operations. In both years, New Brunswick's fixed assets to equity ratio was below the value for all of Canada with the gap widening somewhat in the intervening years. New Brunswick's debt to equity ratio was below that for Canada in 1975, and while both fell in the period to 1978, the fall in the case of the former was more dramatic. New Brunswick's liquidity ratio was below that for Canada in 1975, but rose above it, and in fact above the top 100 by 1978.

In the case of Class III carriers, New Brunswick had a higher ratio of fixed assets to equity than the Canadian average in 1975, and while both increased, the relative position of New Brunswick carriers remained the same in 1978. The situation, with respect to the debt to equity ratio, reversed over the period under review.

In 1975, New Brunswick's ratio was below Canada's, but rose sharply so that it exceeded the Canadian figure by 1978. From the point of view of the liquidity ratio, the New Brunswick industry was considerably weaker than its Canadian counterpart in 1975, and remained so in 1978 though the gap had narrowed considerably as a result of a significant drop in the Canadian ratio.

Before and after tax profit relative to capital employed, equity and total operating income for a variety of jurisdictions in 1975 are presented in Table 6.3.3. Considering all classes together, New Brunswick ranked first among the jurisdictions examined. Viewed from the perspective of the ratio of before tax profit to total income, New Brunswick placed behind all Canadian carriers included in the survey, all Ontario carriers, and the top 100 carriers in Canada. Because of the inability to separate net trucking incomes from other incomes of partnerships and sole proprietorships, the after tax comparisons are not possible at this aggregate level.

When Class I carriers are considered in isolation, New Brunswick ranked second, behind Alberta firms, in the first measure used - before tax profits to capital employed. When considered relative to equity, however, New Brunswick firms ranked first. When profit is measured as a fraction of total operating income, New Brunswick ranked fourth out of the five jurisdictions considered. Using after tax profits, New Brunswick ranked fourth using the first measure, second, using the equity measure, and fourth using the ratio of after tax profits to total operating income.

For Class II operations, New Brunswick ranked ahead of all Canadian carriers when the measure was the ratio of before tax profit to capital employed, behind Canada when the base employed was equity. When considered against total income, the New Brunswick carriers were ahead of the figure for all Canadian carriers. The after tax rankings for all measures were found to be the same as reported using before tax data. In Class III operations, New Brunswick carriers performed less well than the Canada average in the first measure, and better in the other two when before tax profits are considered. For the reason noted previously, after tax profit figures are not available for Class III operations.

Data on the measures previously reviewed are presented in Table 6.3.4. When the situation with respect to all classes is considered, it is revealed that New Brunswick has the best performance with respect to the first two measures used. It should be noted, however, that care must be taken in interpreting these results. Between the two years, the New Brunswick performance, already the highest, improved substantially. It appears that the 1975 results are biased upward because of the broker operations, and the heavy 1977 losses already noted, had the effect of escalating the ratios still further. More reliance should be placed upon the ratio of profit before tax to total operation income, and when this measure is employed, New Brunswick carriers performed slightly below Alberta and Ontario carriers and marginally better than all carriers in Canada. After tax comparisons are not possible due to data availability.

The difficulties in used aggregate data are to a large extent caused by the situation with respect to Class I New Brunswick carriers. When all New Brunswick carriers are considered, the first two ratios yield results much above the Canadian figure. When one considers only carriers of general freight, the ratios are higher still. Available data suggest that this situation was brought about by the destruction of the retained earnings reserve caused by the substantial losses already noted in 1977. When the third measure is considered - after tax profit relative to total income - New Brunswick ranks well below Alberta and slightly below Ontario when all

Table 6.3.3

MEASURES OF BEFORE TAX AND AFTER TAX PROFITABILITY: MOTOR CARRIERS - 1975 -
DATA FOR CANADA AND SELECTED PROVINCES BY CLASS
(percentages)

Category and Area	Before Tax Profit as a Percentage of			After Tax Profit as a Percentage of		
	Capital Empl.	Equity	Total Income	Capital Empl.	Equity	Total Income
ALL CLASSES						
Canada - corp.	5.8	8.5	2.3	5.3	7.8	2.1
Canada - all	13.9	24.9	5.4	N/A	N/A	N/A
Canada - top 100	10.4	22.8	4.9	6.6	14.4	3.1
P.E.I. - all	4.8	7.8	1.6	N/A	N/A	N/A
N.B. - all	16.3	32.2	4.8	N/A	N/A	N/A
Québec - all	7.6	19.1	3.1	N/A	N/A	N/A
Ontario - all	13.2	22.4	5.4	N/A	N/A	N/A
Alberta - all	12.9	25.4	4.7	N/A	N/A	N/A
CLASS I						
Canada	11.7	25.0	4.9	7.3	15.7	3.1
New Brunswick	14.5	37.3	4.2	7.0	18.0	2.0
Québec	8.5	33.4	4.0	3.2	12.7	1.5
Ontario	12.1	20.5	5.2	8.1	13.7	3.5
Alberta	17.0	32.8	7.0	11.0	21.3	4.6
CLASS II						
Canada	12.8	23.7	4.0	8.4	15.6	2.6
P.E.I.	(12.2)	(19.0)	(4.2)	(12.9)	(20.1)	(4.5)
New Brunswick	13.1	19.8	4.2	8.5	12.8	2.7
CLASS III						
Canada	14.0	24.9	5.4	N/A	N/A	N/A
P.E.I.	16.6	27.2	5.5	N/A	N/A	N/A
New Brunswick	13.1	25.8	3.7	N/A	N/A	N/A

Source: Line 1 - Statistics Canada, 61-207, balance calculated from Motor Carriers - Freight. Bracketed figures are losses.

Table 6.3.4

MEASURES OF BEFORE AND AFTER TAX PROFITABILITY: MOTOR CARRIERS - 1978 - DATA FOR CANADA AND SELECTED PROVINCES BY CLASS

(percentages)

Category and Area	Before Tax Profit as a Percentage of			After Tax Profit as a Percentage of		
	Capital Empl.	Equity	Total Income	Capital Empl.	Equity	Total Income
ALL CLASSES						
Canada - corp.	12.3	18.8	4.2	9.3	14.1	3.1
Canada - all	11.9	24.3	5.1	N/A	N/A	N/A
Canada - top 100	7.4	16.0	2.9	4.2	9.0	1.6
P.E.I. - all	30.3	56.0	9.4	N/A	N/A	N/A
N.B. - all	31.6	80.0	5.2	N/A	N/A	N/A
Québec - all	0.8	1.8	0.3	N/A	N/A	N/A
Ontario - all	17.5	37.7	5.4	N/A	N/A	N/A
Alberta - all	17.6	38.1	5.6	N/A	N/A	N/A
CLASS I						
Canada	8.9	18.9	3.2	4.0	8.6	1.4
N.B. - all	45.5	2 196.1	4.8	42.5	2 054.3	4.5
N.B. - general freight	38.1	3 106.0	4.1	N/A	N/A	N/A
Québec	(7.2)	(18.1)	(3.0)	(9.9)	(25.1)	(4.1)
Ontario	13.4	25.4	4.9	8.0	15.1	2.9
Alberta	16.3	30.6	6.1	10.1	19.0	3.8
CLASS II						
Canada	16.9	30.2	5.6	11.6	20.7	3.8
P.E.I.	4.0	9.7	0.9	3.9	9.3	0.8
New Brunswick	30.4	40.3	9.4	22.6	30.0	7.0
CLASS III						
Canada	16.8	43.0	9.4	N/A	N/A	N/A
P.E.I.	33.0	55.6	12.4	N/A	N/A	N/A
New Brunswick	21.0	48.9	4.3	N/A	N/A	N/A

Source: Line 1 - Statistics Canada, 61-207, balance calculated from data in Motor Carriers - Freight and data provided by the Canadian Transport Commission.

carriers in the class are considered. General freight carriers fared less well than the Class I carriers as a category. The Québec losses are also noteworthy, though a discussion of them is beyond the scope of this paper. When one considers the after tax profit picture, the first two ratios must be immediately dismissed for the reasons set out above. With respect to the third ratio, New Brunswick ranks first - well above the other jurisdictions considered.

From the point of view of all three measures employed, both before and after taxes, the New Brunswick Class II segment of the industry performed considerably better than its Canadian counterpart in 1978. With respect to the before tax situation in Class III, New Brunswick in 1978 performed better than the Canadian industry (though less well than Prince Edward Island) according to the first two measures employed. From the point of view of profit as a percentage of total operating income, however, New Brunswick's performance was less than half that of total industry in Canada.

It appears that because of the different structure of the industry as found in different jurisdictions across the country, and because of the impact of losses on retained earnings and therefore the other two bases of profitability, the most reliable approach is to use profits as a percentage of total operating revenues. Viewed in this perspective, the total industry domiciled in New Brunswick tends to perform somewhat below the trucking industry in Ontario, and tends to move up and down relative to the Alberta segment and the Canadian industry as a whole. In both years considered, Class I carriers in New Brunswick, by this measure, performed less well than their Alberta and Ontario counterparts. In 1975, their performance was not as good as the Canadian performance, but in 1978 it was better. In both years, New Brunswick Class II carriers performed better than their Canadian equivalent, while the situation with respect to Class III was reversed.

6.4 Summary and Conclusions

When productivity is measured by revenue per employee, New Brunswick was highest for Class I firms in both 1975 and 1978. For Class II firms, New Brunswick was below the national average in 1975, and above in 1978. With respect to Class III firms, the New Brunswick domiciled trucking industry was above the national average in both years. Overall, New Brunswick ranked behind Alberta in both years. Both provinces were above the national average.

The second measure employed was revenue per dollar of assets. In the case of Class I carriers, the situation here is the same as in the case of revenue per employee. New Brunswick was highest in 1975 and 1978, well above the average Canadian figure. In Class II in 1975, New Brunswick was second to Alberta, with both segments of the industry being above the national figure. This pattern was repeated in 1978. For Class III firms, and for the industry in total, New Brunswick domiciled firms ranked first in both years. With respect to the other measure employed, revenue per dollar of employee compensation, New Brunswick was well above the national average in all four cases.

Finally, there is the question of average revenue per mile operated. For Class I firms, New Brunswick was the leader in both years. For Class II firms, the New Brunswick segment was below the national average in 1975 and had the same average as Canada in 1978. In both years, New Brunswick Class III firms had an average revenue per mile figure below that of the average Canadian firm.

These results must be treated with caution, for they reflect differences in economic structure among the various jurisdictions. The primary difference here is in the role of the broker. Utilization of the broker externalizes labour and its compensation, capital investment, and even mileage operated. As a consequence, other things being equal, the higher the fraction of broker payments to total operating costs, the higher will be the rough productivity measure considered here. It must be recalled that New Brunswick is a heavy user of brokers, particularly in the case of Class I firms, and that the Alberta trucking industry also makes significant use of brokers. These are the two provinces in which the trucking industry tends to perform well in the measures employed in this analysis. The measures are, therefore, subject to the structure of the industry, and hence, must be viewed in that light.

Turning to measures of financial performance, it was seen that overall, New Brunswick had a higher ratio of fixed assets to equity than the total Canadian value in 1975 and had risen significantly by 1978. In the case of Class II carriers, New Brunswick was below the figure for all of Canada in 1975, and while both decreased in the intervening period, the decline in the former was greater. The Class III situation was the revenue of Class II.

The pattern described was almost the same when the debt to equity ratio was considered. All of the Canadian ratios were more or less constant between the two years. For all classes, the New Brunswick ratios rose sharply, indicating a weakening of the financial condition in that jurisdiction.

For all classes taken together, and for Class I carriers, the liquidity ratio was basically stable at the national level between 1975 and 1978. In both cases, the New Brunswick ratios fell, with the decline being more pronounced for Class I carriers. The situation was reversed for the balance of the industry, with the Canadian ratios falling, and the New Brunswick ratios rising.

Three measures of before and after tax profitability were considered for 1975 and 1978. These were profits measured against capital employed, assets, and total operating incomes. The first two of these were rejected because of the impact of the heavy New Brunswick losses in 1977. It was determined that profit as a percentage of total operating income presented a more realistic picture of the true situation.

For all classes considered together, the ratio of before tax profits to total operating income in 1975 was lower in New Brunswick than in Ontario and the country as a whole. After tax profits were not available for this group. With respect to Class I carriers, it was found that New Brunswick carriers ranked fourth in both the before and after tax ratio categories. In Class II, New Brunswick ranked marginally ahead of Canada in both instances. For Class III carriers, New Brunswick's before tax ratio was below the Canadian average.

In 1978, using all classes together, New Brunswick ranked fifth, behind P.E.I., Alberta, Ontario and Canada. When before tax profits are considered, in the case of Class I, it ranked fourth when the measure employed was before tax profits, and first from the point of view of after tax profits. The Class II and Class III situations were the same as found in 1975.

Generally, it can be stated that the motor carrier industry domiciled in New Brunswick tends to perform somewhat less well than that domiciled in Ontario, and moves up and down relative to Alberta and Canada as a whole. Class I New Brunswick carriers have not done as well as those in Alberta and Ontario, and tend to fluctuate above the Canadian average. In Class III, New Brunswick performed less well than the Canadian industry's average, while in Class II, New Brunswick carriers were above the all Canadian performance.

Chapter 7

OBSERVATIONS ON THE TRUCKING SUBSIDY PROGRAMS

7.1 Introduction

A detailed analysis of the trucking subsidy programs for freight originating in 'select territory' cannot be conducted on the basis of the information available. As a consequence, this section will be limited to making a number of observations on the several subsidy programs which apply to the trucking industry. Recommendations for areas of future research will be presented.

The Atlantic Region Freight Assistance Programs are an outgrowth of a set of recommendations made by the four Atlantic premiers to the Minister of Transport in "Some Elements of an Atlantic Region Transportation Policy" in March of 1969. Prior to that time, the freight subvention program, the Maritime Freight Rates Act, had been available only to the rail mode. As a result of this limitation, opinion was generally held that this discriminatory assistance was one of the major reasons for the retardation of the growth of the trucking industry in Atlantic Canada. The basic trucking westbound subsidy program was implemented in 1969. The intra-regional trucking subvention appears in 1971-72. Additional selective assistance was initiated in April 1974 for both rail and truck. In 1978, the concept of a blanket intra-regional subsidy was eliminated. For those commodities deemed eligible to receive special assistance, this meant no change. However, for those excluded, a phase-out period was established. On September 1, 1978, the rate of assistance for such commodities was reduced to 7.5% (from the previous 15%) and on September 1, 1979, the subsidy was removed.

Up to the fiscal year 1972-73, the total subsidy payments to the rail mode exceeded those made to trucking. In the following year, the total trucking subsidy exceeded rail for the first time. Since that time, the proportion of assistance paid to trucking has been steadily rising, reaching 77.6% of the total assistance in the fiscal year 1979-80. Between 1971-72 and 1978-79, total freight subventions for the region increased by 180.6%. Assistance paid to rail rose from 13.1 million to 17.5 million, an increase of 33.6%. Payments to the trucking sector rose from 7.0 million to 38.9 million.

The greatest proportion of payments are made for shipments within select territory. During 1978-79, 52.6% of the rail payments were on intra-select territory movements. In the same year, 68.9% of the truck subventions went for shipments inside select territory. The average for both modes was 63.8%. Five years previous, the intra-shipments had accounted for an even higher 71% of total subsidy payments.

The magnitude of the subsidy payments and the growth in these payouts suggest that a detailed study of what has transpired in the past would be a fruitful area of research. Such a study is beyond the scope of the current investigation. To be properly executed such a study would have to be undertaken on a commodity-by-commodity basis and most probably on a market-by-market basis. It would need to consider production costs as well as transportation and other distribution costs, not only within the region, but at competitive supply points. Only with data at that level of detail would a reliable evaluation of the impact of the subsidy programs be possible.

This section of the report has more limited ambitions. It seeks to determine the importance of the subsidy program to the New Brunswick domiciled trucking industry and to discuss the provincial breakdown of subsidy payments, and for a range of commodity groups, in order to consider the effective (as opposed to nominal) rate of transportation assistance. These questions are considered in order.

7.2 Importance of Subsidy Payments to Trucking Industry

Subsidies paid to New Brunswick domiciled trucking firms in 1978 are presented in Table 7.2. The available data suggest that for the year in question, the subsidy payments accounted for between 4.32% and 7.80% of the total operating revenues of those carriers domiciled in the province of New Brunswick. For two of the classes (Class I and Class III) and for the industry as a whole, the subsidy payments could make the difference between a profit and loss situation. Admittedly, the removal of the subsidy program would result in higher rates to shippers, so that this comparison is not strictly fair, but, given the usual assumption of a downward sloping demand curve at the industry level, it is clear that one of the major impacts of the subsidy program relates to the profitability of the industry.

In the case of Class I carriers, the subsidy payments were 1.351 times net operating revenue and 1.426 times before tax profit in 1978. The figures for Class II carriers were 0.90 and 0.83, respectively. Given that 40.6% of the New Brunswick Class III carriers are organized either as sole proprietorships or partnerships (where distinctions cannot be made between the owner's net trucking revenues and other income sources), before tax profits are unavailable. They are also unavailable for the industry as a whole. In the case of Class III carriers, subsidy payments were 1.006 times net operating revenue in 1978. For the industry as a whole, the equivalent figure was 1.265 times the net operating revenue.

It can, therefore, be concluded that given the existing structure, the subsidy payments could mean the difference between profit and loss for three of the four industry groups discussed. Furthermore, the subsidy payments appear to account for almost all of the profit in the other group - the Class II carriers. Viewed from this perspective, the rate subvention policy is important to the trucking industry. Changes in the program could be viewed as having negative impacts in the sense that it would raise the operating ratio and reduce industry profitability. The precise impact cannot be measured on the basis of the information presently available.

Table 7.2

1978 FREIGHT CARRIERS SUBSIDIES - IMPORTANCE TO THE NEW BRUNSWICK DOMICILED FIRMS
(million dollars)

Item	Class I	Class II	Class III	Industry
Operating Revenue	$ 57.696	$ 19.692	$ 16.701	$ 94.090
Operating Costs	$ 55.201	$ 17.978	$ 15.984	$ 89.163
Net Operating Revenue	$ 2.945	$ 1.714	$ 0.717	$ 4.926
Profit (Loss) Before Tax	$ 2.789	$ 1.842	N/A	N/A
Subsidy Payments	$ 3.978	$ 1.535	$ 0.721	$ 6.233
Provision Income Tax	$ 0.180	$ 0.472	N/A	N/A
Subsidy/Operating Revenue	6.89 %	7.80 %	4.32 %	6.62 %
Subsidy/Net Operating Revenue	135.10 %	0.90 %	100.60 %	126.50 %
Subsidy/Before Tax	142.60 %	0.83 %	N/A	N/A

Source: Statistics Canada, Motor Carriers - Freight and Household Goods Movers, and data provided by the Canadian Transport Commission.

7.3 Atlantic Region Freight Assistance Payments Through Time

It is also instructive to examine the changes in the various categories of subsidy payments over time. Data for the various programs, for the period 1977-78 through 1979-80, are shown in Table 7.3 for New Brunswick and the nation as a whole. The table suggests that, in the aggregate, the share of total subsidy payments received by New Brunswick domiciled trucking firms is increasing through time. The New Brunswick share of the total rose from 33.8% in the initial year to 37.2% in the final year under consideration.

At the same time, it is instructive to note that the share received by New Brunswick domiciled firms differs as among the various types of assistance available. In all three years, it was greatest in the case of the selective westbound assistance program, and least in the case of the regular westbound assistance program. The New Brunswick share of the former increased between the first year and the second, decreasing somewhat during the third. The same pattern is obvious in the regular assistance case. The share of such assistance received on intra-select territory shipments lies between the two westbound cases, and is closer to the selective situation than to the regular.

The amount of assistance increased by 48% in the period under review, while that received by New Brunswick firms rose by 62.7%. As is typical of the overall program, most of the assistance paid to New Brunswick firms related to intra-regional shipments. This program accounted for 76.7% of the total assistance provided in 1979-80, compared with a national figure of 73.2%.

7.4 The Intra-Select Territory Subsidy Program

It is with respect to this component of the overall program that most of the policy changes have occurred in the past. Until 1969, there were no rate subvention policies applicable to highway transport. In that year, the ARFAA was passed, and a westbound subsidy was made available to highway transport. In 1971, the rate of subsidy was reduced from 20 to 17.5%, and the program was extended to cover intra-regional truck movements. In 1975, the rate of subsidy was further reduced to 15%, and a small shipment exemption was introduced. Effective September 1, 1978, the intra-program was made selective. Provisional assistance was provided for those commodities deemed not eligible for the selective program.

Despite the fact that significantly more money is involved, data on the intra-program are somewhat sketchy. For the province of New Brunswick, such data as are available are presented in Table 7.4. These data are subsidy payments made in connection with New Brunswick originating or terminating intra-select territory shipments. They are not to be confused with the data of Table 7.3, which are payments made to New Brunswick domiciled trucking firms. Furthermore, it is to be noted that the definitions employed in the table are not the usual definitions used in discussions of economic regulation. In the context of the present discussion, the term regulated means common carrier. The term unregulated, on the other hand, encompasses not only exempt carriers, but also contract carriers.

Table 7.3

ATLANTIC REGION FREIGHT ASSISTANCE: TRUCK MODE SUBSIDY PAYMENTS BY DOMICILE - NEW BRUNSWICK CARRIERS AND CANADA TOTAL 1977-78 to 1979-80 (million dollars)

Year and Program	New Brunswick ($)	Canada ($)	N.B./Canada (%)
1977-78			
A.R.F.A.	1.162	4.541	25.6
A.R.S.A.	0.550	1.340	41.0
A.R.S.T.A.	6.908	19.618	35.2
Total Assistance	8.620	25.499	33.8
1978-79			
A.R.F.A.	2.074	7.130	29.1
A.R.S.A.	1.038	2.384	43.5
A.R.S.T.A.	7.057	19.512	36.2
A.R.S.S.P.A. Selective	2.456	6.218	39.5
A.R.S.S.P.A. Provisional	0.496	1.134	43.7
Total Assistance	13.122	36.378	36.1
1979-80			
A.R.F.A.	2.166	7.531	28.8
A.R.S.A.	1.097	2.571	42.7
A.R.S.T.A.	0.370	0.959	38.6
A.R.S.S.P.A. Selective	8.924	22.957	38.9
A.R.S.S.P.A. Provisional	1.470	3.716	39.6
Total Assistance	14.027	37.734	39.6

Notes:
A.R.F.A. - Atlantic Region Freight Assistance
A.R.S.A. - Atlantic Region Selective Assistance
A.R.S.T.A. - Atlantic Region Special Transportation Assistance
A.R.S.S.P.A.- Atlantic Region Special Selective and Provisional Assistance

Source: Data provided by the Canadian Transport Commission.

Table 7.4

1978 ATLANTIC REGION FREIGHT ASSISTANCE PAYMENTS: INTRA-ATLANTIC MOVEMENTS - NEW BRUNSWICK ORIGINS AND DESTINATIONS BY TYPE OF CARRIER AND IN TOTAL
(million dollars)

Place of Origin or Destination	Intra-Regulated		Intra-Unregulated		Intra-Total	
	New Brunswick Origins	New Brunswick Destinations	New Brunswick Origins	New Brunswick Destinations	New Brunswick Origins	New Brunswick Destinations
Newfoundland	0.000	0.071	0.000	0.006	0.000	0.077
Prince Edward Island	0.363	0.091	0.013	0.029	0.376	0.120
Nova Scotia	0.884	1.437	0.060	0.290	0.944	1.727
New Brunswick	3.306	3.306	2.487	2.487	5.793	5.793
Québec	0.134	0.099	0.049	0.280	0.183	0.379
Total N.B. Movements	4.687	5.004	2.609	3.092	7.296	8.096
N.B.-N.B./Total N.B.	70.5%	66.1%	95.3%	80.4%	79.4%	71.6%
A.R.F.A. Total Payments		12.380		7.907		20.287
N.B./A.R.F.A. Totals		26.7%		31.5%		28.6%
Québec/A.R.F.A. Totals		4.6%		27.6%		13.5%

Source: Data on which this table is based were provided by the Canadian Transport Commission.

Several observations on the data in the table should be made. First, most New Brunswick related shipments are movements entirely within the province. In the regulated segment, for example, for New Brunswick origins, 70.5% of the subsidy was earned on shipments destined for other points in the province. In the case of New Brunswick destinations, 66.1% of the subsidy was earned on goods having another New Brunswick point as the origin. The same pattern emerges when one considers the unregulated segment of the industry. When the data are considered from the point of view of New Brunswick origins, 95.3% of the subsidy were earned on shipments to other New Brunswick points. For New Brunswick destinations, the equivalent figure was 80.4%.

When the share of the total programs accounted for by New Brunswick shipments is considered for the regulated segment, it is found that intra-New Brunswick shipments accounted for 26.7% of the total cost of the program. In comparison, Gaspé-to-Gaspé shipments accounted for only 4.6% of the program. In the unregulated segment, the share of total payments accounted for by New Brunswick-to-New Brunswick shipments was even higher at 31.5%. In the case of Gaspé-to-Gaspé shipments, the equivalent figure was 27.6%. Overall, the New Brunswick and Gaspé figures are 28.6% and 13.5%, respectively.

In the unregulated segment, New Brunswick-to-New Brunswick and Gaspé-to-Gaspé shipments together account for 59.1% of the program. Overall, such shipments make up 42.1% of the program. It is apparent from the magnitudes involved that there is little trade among the five areas in question. In fact, if intraprovincial movements are examined it is found that they account for 70.4% of the total regulated subsidy payments made in 1977. In the unregulated case, the proportion is even higher at 89.8%. For the two components considered together, intraprovincial movements account for 78% of the total intra-select territory subsidy payments. Clearly, only a small portion of the subsidy program is used to assist interprovincial trade - 22% of the total.

Several observations are possible at this point. In the first place, the regulated movements account for 61% of the total intra-program. A high proportion of these payments are made for intraprovincial shipments. The proportion of the total unregulated subsidy accounted for by intraprovincial movements is even higher at 89.8%. Only a small proportion of the subsidy assistance goes to commodities moving between the provinces included in the select territory of the intra-regional program.

7.5 The Westbound Subsidy Programs

As previously noted, the westbound trucking assistance program began in 1969. Initially, the rate of subvention was set at 30% pro rata on distance - the same proportion as being received by the railways under the Maritime Freight Rates Act. In April, 1974, the rate of westbound assistance was increased to 50% pro rata on distance for certain selected commodities moving westward from the Atlantic Provinces. The rates of subsidy noted above are nominal rates, for the assistance is paid only on that part of the movement east of a line drawn from Lévis to Diamond Junction. The effective rates of subsidy tend to be much lower and are a function of the proportion of the total movement inside select territory and the nominal rates. For example, on a movement where half of the distance is inside select territory, and the balance west of the Lévis line, the effective rate of subvention would be half of the nominal rate - 15% or 25% depending upon the program into which a particular commodity falls.

The regular (or 30%) westbound subsidy program will be considered first. Once this is done, attention will be directed to the selective westbound program. Finally, the overall program will be evaluated.

Data for Prince Edward Island origins, New Brunswick origins, Gaspé origins and the total regular program are shown in Table 7.5.1. The data reveals that 49.7% of the total regular westbound subsidy payments in 1977 were made for Gaspé-originating shipments. A further 16.7% of the payments went in support of commodities moved westward out of New Brunswick. These two provinces absorbed 66.4% of the total regular westbound payments in that year. When movements are considered from the point of view of tonnage, the Gaspé domination is even more pronounced. Gaspé origins accounted for 68.6% of total tonnage, with New Brunswick accounting for only 15.9%. These two provinces accounted for 84.5% of the total tonnages moved under this subvention program. Average mileage figures were not available, so that it is impossible to consider this question from the point of view of the proportion of ton-miles.

Subsidy per ton figures are also presented in the Table 7.5.1. However, in the absence of distance figures, these figures are difficult to interpret. However, it is clear that distances are important in interpreting these data. In the case of Prince Edward Island, for example, a large proportion of the total movements are for potatoes moving into the Toronto market. Most of the Gaspé shipments, on the other hand, tend to be much shorter haul, destined to other points in Québec. However, it is necessary to defer discussion of this matter until later in the chapter.

In the absence of information on length of haul, it is necessary to employ a proxy for the effective rate of subsidy. The ratio of subsidy payments to total charges appears to be the best proxy available. This measure reflects the deficiency that rates are not necessarily proportionate to distance for a variety of reasons. As an approximation, however, this ratio should be satisfactory. It suggests that on the average, the effective rate of subsidy in the case of P.E.I. origins is 11.4%. In the case of New Brunswick, the figure is 12.7%, and in the case of Gaspé, it is 13.4%.

Data on the selective westbound subsidy program are shown in Table 7.5.2. These data are based on the same origins as previously used. The distribution of the subsidy received by province of origin is markedly different in this case. Under this program, New Brunswick accounts for 42.4% of the total subsidy, and 43.8% of the tonnage moved. Gaspé accounts for 17.1% of the subsidy, and 32.8% of the tonnage moved. The Prince Edward Island shares are markedly lower being 9.8% and 6.3%, respectively. In the selective program, these three provinces account for 69.3% of the total. In the regular program, they accounted for 68.4%.

Table 7.5.1

ATLANTIC REGION FREIGHT ASSISTANCE ACT: **REGULAR WESTBOUND SUBSIDY -**
SELECTED PROVINCES AND TOTAL ASSISTANCE - 1977

Item	P.E.I. Origins	**N.B. Origins**	**Gaspé Origins**	**Total**
Weight (tons)	2 016.50	44 544.80	192 323.60	280 211.60
Billed Revenue (000$)	444.40	3 316.40	9 232.00	18 828.00
Subsidy (000$)	57.20	482.40	1 433.20	2 885.20
Total Charges (000$)	501.20	3 798.80	10 665.20	21 713.20
Subsidy per Ton ($)	27.13	10.83	7.45	10.30
Subsidy/Billed Revenue (%)	12.90	14.50	15.50	15.30
Subsidy/Total Charges (%)	11.40	12.70	13.40	13.30
Tonnage Moved (%)	0.80	15.90	68.60	100.00
Subsidy Received (%)	2.00	16.70	49.70	100.00

Nominal Rate of Subsidy: 30% on portion of **movement east of Lévis/Diamond Junction.**

Source: Raw data provided by the Canadian Transport **Commission.**

Table 7.5.2

ATLANTIC REGION FREIGHT ASSISTANCE ACT: SELECTIVE WESTBOUND SUBSIDY - SELECTED PROVINCES AND TOTAL ASSISTANCE - 1977

Item	P.E.I. Origins	N.B. Origins	Gaspé Origins	Total
Weight (tons)	35 504.80	247 234.00	185 486.00	564 684.40
Billed Revenue (000$)	994.80	6 459.60	2 824.80	13 439.60
Subsidy (000$)	368.40	1 595.60	644.80	3 763.60
Total Charges (000$)	1 363.20	8 055.20	3 469.60	17 203.60
Subsidy per Ton ($)	10.38	6.45	3.48	6.66
Subsidy/Billed Revenue (%)	37.00	24.70	22.80	28.00
Subsidy/Total Charges (%)	27.00	19.80	18.60	21.90
Tonnage Moved (%)	6.30	43.80	32.80	100.00
Subsidy Received (%)	9.80	42.40	17.10	100.00

Nominal Rate of Subsidy: 50% on portion of movement east of Lévis/Diamond Junction.

Source: Raw data provided by the Canadian Transport Commission.

One surprising result is that the subsidy per ton figures are lower in the case of the selective assistance program than in the case of the regular program despite the difference in the rate of subvention. This is a matter to which more attention will have to be paid later when specific commodity groupings are discussed.

Turning attention to the proxy for the effective rate of subsidy, it can be seen that the ratio of subsidy to total charges is higher than in the regular westbound case. For P.E.I., it is 27%, for N.B., 19.8% and for Gaspé, 18.6%. For the program as a whole, the figure is 21.9%. This represents a change from the regular program. In that program, the ratio of subsidy to total charges increased when moving from P.E.I. to N.B. to Gaspé. In this case, the trend is the reverse, with P.E.I. having the highest ratio among the provinces considered, followed by N.B., and Gaspé. As before, further discussion of this item is deferred until later.

Finally, to obtain an impression of the distribution of the benefits from the westbound program overall, the data from the two subprograms were combined. The data generated for the same geographical breakdown as before are presented in Table 7.5.3. Immediately, it must be noted that while the ratio of subsidy to total charges has been computed, it is no longer a proxy for the effective rate of subsidy, for there is no single rate of subsidy against which to compare. These data are presented for the purposes of information only.

Viewed from this aggregate position, New Brunswick and Gaspé both receive the same fraction of the total subsidy payments made on westbound shipments - 31.3%. Prince Edward Island receives only 6.4% of the total. Gaspé has the largest subsidized tonnage, accounting for 44.7% of the total. New Brunswick accounts for a further 34.5% and Prince Edward Island accounts for 4.5%.

Despite percentages of tonnages and subsidy, P.E.I. has the highest ratio of subsidy to total charges, 22.8%. New Brunswick follows with 17.5%. The ratio for Gaspé is 14.7%, and in total, the ratio is 17.1%. Prince Edward Island also receives the highest subsidy per ton amounting to $11.32. The New Brunswick value is $7.12 and the Gaspé value is $5.50. Both are below the overall average of $7.87 per ton.

There are some apparent anomalies in the westbound data presented. It appears that one way to try and resolve these is to consider the question from the point of view of subsidy payments made for major commodity groups. Groups of commodities, rather than specific commodities, are considered because of the availability of a larger data base. The only data available on the leading commodities shipped by each province are the subsidy figures.

7.6 Subsidization of Selected Westbound Commodity Group Movements

In order to provide a greater insight into the workings of the westbound subsidy program, it is necessary to consider the subsidization of selected commodity groups in greater depth. The basis for selection of the groups is the proportion of total subsidy paid on a provincial basis as well as considering the data on the basis of the most important destinations by

Table 7.5.3

ATLANTIC REGION FREIGHT ASSISTANCE ACT: REGULAR AND SELECTIVE WESTBOUND SUBSIDY - SELECTED PROVINCES AND TOTAL ASSISTANCE - 1977

Item	P.E.I. Origins	N.B. Origins	Gaspé Origins	Total
Weight (tons)	37 611.20	291 778.80	377 809.60	844 896.00
Billed Revenue (000$)	1 439.20	9 776.00	12 056.80	32 267.60
Subsidy (000$)	425.60	2 078.00	2 078.00	6 648.80
Total Charges (000$)	1 864.40	11 854.00	14 134.80	38 916.80
Subsidy per Ton ($)	11.32	7.12	5.50	7.87
Subsidy/Billed Revenue (%)	29.70	21.30	17.20	20.60
Subsidy/Total Charges (%)	22.80	17.50	14.70	17.10
Tonnage Moved (%)	4.50	34.50	44.70	100.00
Subsidy Received (%)	6.40	31.30	31.30	100.00

Source: Raw data provided by the Canadian Transport Commission.

province. Of the three provinces discussed only the New Brunswick case is considered in detail. For the purposes of comparison, some commodity group data from Gaspé are presented in Table 7.6. Identical information on the Prince Edward Island case is presented in the report dealing with that province.

The commodity groups were chosen and ranked by category on the basis of the subsidy assistance received. Despite the limited number of groups shown, a large proportion of the subsidy payments are included. In the case of westbound commodities shown for New Brunswick, these six groups accounted for 67.8% of the subsidy paid. The proportion of the selective assistance included is even higher. The four commodity groups shown accounted for 88.5% of the selective subsidy paid for New Brunswick origins. It will be recalled from the earlier tables that the selective assistance accounts for more than 75% of total assistance paid for New Brunswick origins. The situation, with respect to Gaspé origins, is reversed. The commodity groups shown account for 80.1% of the regular westbound assistance paid, while 69.4% of the selective assistance payments are included even though only two commodities are listed. In Gaspé, regular assistance makes up more than 70% of the total assistance paid on the basis of these origins.

The data for New Brunswick regular assistance payments display considerable diversity. Subsidy payments per ton, range from $4.61 to $53.88. This last figure, paid for miscellaneous freight shipments, is really an outlier. Most commodities receive considerably less. For the commodity groups included, the subsidy to total charges ratio, the proxy being used for the effective rate of subsidy, range from 9.8% to 18.7%, with a clustering around the range 14.5% to 16.5%.

Selective assistance payments, likewise, demonstrate considerable diversity, though the range is narrower than reported above. While food and kindred products earn the highest total subsidy, they have the lowest subsidy per ton amount for the groups shown. As expected from the nature of the two groups of commodities, selective assistance per ton is higher than the regular assistance per ton. Subsidy to total charges ratios tend to be higher as well, reflecting the higher nominal rate of subsidy. It is highest in the farm products group with the ratio being 29.6%.

The lumber/wood products group dominated the regular Gaspe assistance payments, accounting for almost half of the total assistance payments received by those origins. The reason is clearly volume of shipments, for the subsidy per ton figure is considerably less than that for New Brunswick. Farm products, though having a low total assistance payment, have an extremely high subsidy per ton figure - $82.63. The subsidy to total charges ratio, however, is low at 10.5%.

Finally, there are the Gaspé selective assistance payments. Pulp and paper products absorb the largest subsidy payment in this group. Subsidy per ton is a modest $4.84, though the ratio of subsidy to total charges was 25.9%, and was second only to farm products from New Brunswick among the commodity groups listed in the table. Food and kindred products move in large volumes, and it is this factor which results in their inclusion. The subsidy per ton is only $1.96, though the estimated effective rate of subsidy is 18.7%.

Table 7.6

REGULAR AND SELECTIVE SUBSIDY DATA FOR LEADING COMMODITY GROUPS
NEW BRUNSWICK AND GASPÉ - 1977

Commodity Group	Weight (tons)	Billed Rev. (000$)	Subsidy (000$)	Total Charges (000$)	Subsidy/Ton ($)	Sub./Bill.Rev (%)	Sub/TotCh (%)
New Brunswick Regular Westbound							
Misc. Freight Ship.	3 517	1 743.2	189.5	1 932.7	53.88	10.9	9.8
Food/Kindred Prod.	4 933	207.3	41.2	248.5	8.35	19.9	16.6
Waste/Scrap Materials	6 033	137.4	27.8	165.2	4.61	20.2	18.7
Lumber/Wood Prod.	4 264	125.4	23.4	148.8	5.49	18.7	15.7
Machinery (not elect.)	2 220	134.1	22.9	157.0	10.32	17.1	14.6
Fab. Metal Prod.	2 301	122.7	22.3	145.0	9.69	18.2	15.4
New Brunswick Selective Westbound							
Food/Kindred Pro.	109 948	3 631.1	807.0	4 438.1	7.37	22.2	18.2
Pulp, Paper, etc.	52 684	1 016.0	256.7	1 272.7	19.28	25.3	20.2
Lumber/Wood Prod.	40 607	862.6	203.6	1 066.2	21.24	23.6	19.1
Farm Products	25 923	346.7	145.5	491.2	13.34	42.1	29.6
Gaspé Regular Westbound							
Lumber/Wood Prod.	130 260	6 201.9	1 035.6	7 237.5	7.95	16.7	14.3
Farm Products	760	537.2	62.8	600.0	82.63	11.7	10.5
Primary Metal Prod.	18 434	265.4	50.1	315.5	2.72	18.9	15.9
Gaspé Selective Westbound							
Pulp, Paper, etc.	50 846	705.5	246.1	951.6	4.84	34.9	25.9
Food/Kindred Products	103 145	875.9	201.7	1 077.6	1.96	23.0	18.7

Source: Raw data provided by the Canadian Transport Commission.

To a very large extent, the apparent anomalies noted earlier concerning the westbound programs are explained by the great diversity among the commodity groups making up the total origins from the various provinces. The large amount of subsidy paid to commodities of Gaspé origin are the result of large flows of a limited number of commodities.

7.7 Specific Commodity Movements

Finally, it is necessary to consider briefly the subsidization of the most important westbound commodity flows. Only origins in New Brunswick and Gaspé are considered.

At the outset, it should be noted that the only data available on the movement of specific commodities are those for subsidy payments for the westbound program. The analysis in this section is therefore more limited than desired. Nevertheless, the data are sufficient to allow some observations to be drawn. The data are shown in Table 7.7.

Before these data are discussed, it is necessary to review briefly the objectives of the overall program. The Atlantic Region Freight Assistance Programs are, in reality, an outgrowth of the Maritime Freight Rates Act which began in 1927. Parallel trucking assistance was provided under the former program to remove the discriminatory nature of the latter. According to the preamble of the original M.F.R.A., the Act was designed to permit Maritime manufacturers, merchants and traders access to the markets of all of Canada rather than the restricted markets of the Maritimes. Viewed in this light, the program can be thought of as one attempt to stimulate the economy of the Atlantic Region.

Viewed in this light, it may be said that the leading products included in both the New Brunswick and Gaspé selective assistance program do achieve that end. The commodities subsidized are newly produced, and while definitive answers cannot be provided on the basis of the information which is available, it seems most probable that the subsidy does play a role in permitting penetration of the central Canadian markets. Given that the extent of value added is a criterion for a commodity's inclusion in this group, this should not be a surprising result.

With respect to the Gaspé regular assistance program, all of the five leading commodities are associated with the forestry sector. While it could be argued that it would be more desirable to retain these inputs in the region for further processing, and that subsidizing the outward movements of raw materials is not really consistent with development objectives, it must also be remembered that the selective assistance program is of recent vintage, and present shipping patterns reflect the earlier program among other things.

There appear to be some difficulties in justifying some of the leading commodities moving westward under the regular program from New Brunswick origins. Here, the leading commodity is used household goods. While there are no firm figures available, it appears safe to argue that a significant proportion of these shipments involve the relocation of military personnel. To the extent that this is the case, the federal government is

Table 7.7

LEADING COMMODITIES RECEIVING SUBSIDY: REGULAR AND SELECTIVE ASSISTANCE PROGRAMS - NEW BRUNSWICK AND GASPÉ - 1977

New Brunswick - Select	$ 6 391.18	Frozen prepared foods or soups
	$ 37 767.27	Frozen vegetables
	$ 35 263.89	Potatoes, other than sweet
	$ 28 609.49	Wood particle board
	$ 26 180.34	Fiberboard, paperboard or pulpboard
New Brunswick - Regular	$ 46 461.00	Household goods
	$ 4 148.75	Misc. manufactured products
	$ 3 118.30	Lead pig, slab, ingots or bullion
	$ 2 904.71	Metal scrap, wastes or tailings
	$ 2 389.63	Canned or preserved fruits
Québec - Select	$ 51 862.89	Fiberboard, paperboard or pulpboard
	$ 34 506.87	Bulk fluid milk, skim milk or cream
	$ 6 605.83	Paper
	$ 5 399.34	Creamery butter
	$ 4 703.12	Household appliances, electrical
Québec - Regular	$ 114 102.33	Pulpwood logs
	$ 42 995.52	Sawlogs
	$ 36 088.09	Shavings or sawdust
	$ 28 336.44	Pulpwood or other wood chips
	$ 16 368.63	Lumber, rough or dressed

Source: Canadian Transport Commission.

simply paying money out of one pocket into another. Efforts should be made to determine the extent of this occurrence. In any case, it is most difficult to relate the movement of this commodity to economic stimulus efforts, and it is suggested that this commodity be removed from the list of those eligible to receive the rate subvention.

It would be desirable to review the question of small shipments from both the intra and the westbound point of view. Unfortunately, the unavailability of data precludes this step. It should be noted that in 1975 a small shipment exemption was initiated in the case of the intra-program. Shipments, where the transportation cost to the shipper was less than $10.00, was deemed not eligible for subsidy. Given the escalation in transportation charges since that time, many of the shipments which would have been excluded in 1975 are eligible for subsidy in 1981. It is suggested that the small shipment exemption for the intra-program be reviewed, and that consideration be given to extending it to the westbound program as well. It appears that a billed revenue of $25.00 would be a reasonable lower limit for the exemption. However, to preclude a repetition of the previous experience, it is suggested that the minimum shipment size be indexed, by means of a transportation charges index worked out by FPCART, so that the lower limit is maintained in real terms in the future.

7.8 Summary and Conclusions

The amount of subsidy paid under the variety of trucking assistance programs available is of considerable magnitude, and has been increasing rapidly through time. Given the probable future increases in trucking costs, it is likely to increase substantially in the future. This suggests that there is a need for detailed study of the programs to determine their effectiveness so as to obtain the greatest possible benefits from the dollars expended. Such a study needs to be carried out at a very detailed level, focusing on specific commodities and markets.

The subsidy programs are important to the New Brunswick trucking industry, making the difference between a profit and loss for two of the three classes in 1977. Any changes in the programs must take into account the impacts of this industry.

The intra-select territory programs absorb most of the subsidy dollars. Data on this program reveal the small amount of interprovincial trade taking place in the five eastern provinces. The subsidy payments, which reflect billed revenue and tonnage flows, reveal that most activity is intraprovincial in nature. Most of the payments in this program go to regulated carriers, the group called common carriers in other terminology.

Data on the westbound programs reveal that Gaspé and New Brunswick both received the same amount of subsidy in 1977, and that the two combined accounted for 62.6% of total payments. Available evidence also suggests that the effective rate of westbound subsidy is substantially below the nominal rates. When specific commodity groups are considered, it is found that there is considerable diversity among groups, more diversity than among the provinces of origin. The anomalies which seemed to exist in the agregate are explained by this diversity.

A final section of the chapter focused on specific commodity movements, those being the most important five commodities in each of the five jurisdictions. The data do not reveal any difficulties with respect to the objectives of the program as far as the selective program is concerned, nor any that could be easily resolved with respect to the regular program as related to Gaspé. However, the merit of including used furniture as a commodity eligible for regular westbound assistance from New Brunswick (and the other areas as well) is questionable, and this represents one possible exclusion from the list of eligible commodities.

In this section as well, the question of the small shipment exclusion was discussed. There is a strong case for increasing the existing small shipment exemption to $25.00 immediately, and indexing this amount so that it remains constant in real terms. There is an equally strong case for extending the small shipment exclusion to the westbound programs.

Data do not exist which permit analysis as to other possible changes in any of the subsidy programs. While it can be argued that changes are necessary in view of the ever mounting costs of the programs, changes should not be made until such time as their impact can be assessed.

APPENDIX A

OUTLINE OF RE-CODED COMMODITY LABELS FROM THE STANDARD COMMODITY CLASSIFICATION SYSTEM

The following listing outlines the commodity codes that were used to summarize the 1979 Origin-Destination Study data. The codings are listed in terms of their 2-digit STCC Commodity Values as contained in Volume 1 of the Standard Commodity Classification Manual.

Code	Title	STCC Division Code	STCC Title
0		00	Live Animals
01	Meat	01	Meat and Meat Preparations
03	Fish	03	Fish
04	Other Marine	04	Other Marine
05	Dairy Products	05	Dairy Products, Eggs & Honey
06	Grains	06	Cereal Grains
07	Foodstuffs	07	Fruit
		08	Nuts
		09	Vegetables
		10	Sugar
		11	Cocoa, Coffee, Tea
		12	Margarine
		14	Other Foods
15	Feed	15	Feed and Fodder
17	Beverages	17	Beverages
18	Tobacco	18	Tobacco
20	Animal Prod.	20	Crude Animal Products Inedible
21	Vegetable Prod.	21	Crude Vegetable Products
23	Crude Wood	23	Crude Wood Materials
24	Textiles	24	Textile & Related Fibres
25	Metals	25	Metal Ores
26	Coal Crude	26	Coal, Crude Petroleum
27	Crude Non-metal	27	Crude Non-Metallic Minerals
29	Scrap	29	Other Waste and Scrap Materials
30	Furs, Leather	30	Leather
		31	Furs, Dressed
		32	Rubber and Plastic Fabricated Materials
33	Wood Products	33	Wood Fabricate Materials
34	Pulp	34	Pulp
35	Paper	35	Paper and Paperboard
36	Textile Products	36-38	Textile Fabricated Materials Oils, Fats, Waxes etc.
40	Chemicals	40-42	Chemicals and Related Products
45	Petrol Products	43	Petroleum and Coal Products
44	Metal Products	44	Iron, Steel and Alloys
		45	Non-Ferrous Metals
		46	Metal Fabricated Basic Products
		47	Non-Metallic Mineral Basic Products
		49	Miscellaneous Fabricated Materials

Code	Title	STCC Division Code	STCC Title
50	Machinery and Manuf.	50-96	All of Section 5, End Products Inedible
999	Unidentified		

APPENDIX B

APPENDIX A, B AND C FROM PART IV - SECTION 231 OF THE NEW BRUNSWICK MOTOR VEHICLE ACT

MOTOR VEHICLE ACT 1955

OFFENCES

31A (1) It shall be an offence for any person to operate a vehicle or combination of vehicles

(a) with a mass on any axle or axle group in excess of that prescribed in section 30;

(b) of a type set out in Appendix "C" with a gross mass in excess of the gross mass range there set out for that vehicle; and

(c) with a gross mass in excess of that for which it has been registered pursuant to section 31.

(2) Notwithstanding anything contained in this Regulation, no person shall operate a vehicle or combination of vehicles on any highway other than those highways listed in Appendix "D" with a gross mass in excess of 38 500 kg.

79-146; 79-207

MOTOR VEHICLE ACT 1955

TOLERANCES

31B The only tolerance permitted shall be at the written discretion of the Minister of Transportation.

APPENDIX "A"

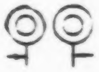
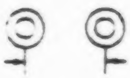
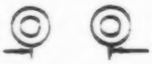
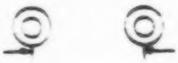
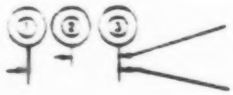
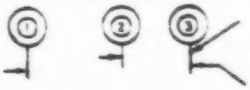
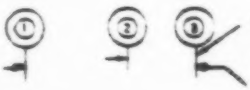
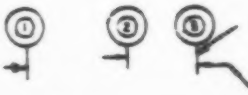
MAXIMUM ALLOWABLE MASS ON SINGLE FRONT AXLE ACCORDING TO TIRE SIZE

FRONT TIRE SIZE (RATES WIDTH IN MILLIMETRES)	ALLOWABLE FRONT AXLE LOADING (KILOGRAMS)
209 to 228	4 500
229 to 241	4 900
242 to 253	5 200
254 to 266	5 600
267 to 279	5 900
280 to 291	6 000
292 to 304	6 350
305 to 316	6 500
317 to 329	6 800
330 to 342	7 000
343 to 355	7 500
356 to 367	7 700
368 to 380	8 000
381 to 393	8 200
394 to 405	8 400
406 to 418	8 600
419 to 431	8 850
432 and over	9 000

MOTOR VEHICLE ACT 1955

APPENDIX "B"

MAXIMUM ALLOWABLE TANDEM MASS AND TRIPLE MASS ACCORDING TO AXLE SPACING

AXLE GROUP	Maximum Allowable Tandem Mass - For a straight truck or truck tractor	Maximum Allowable Tandem or Triple Mass - For a trailer or semi-trailer
 1.20 m minimum but less than 1.35 m	16 000 kg	16 000 kg
 1.35 m minimum but less than 1.50 m	16 500 kg	16 500 kg
 1.50 m minimum but less than 1.80 m	17 000 kg	17 000 kg
 1.80 m minimum	17 000 kg	18 000 kg
 (2 to 3) 1.20 m minimum (1 to 3) 2.40 m minimum	NOT PERMITTED	20 500 kg
 (2 to 3) 1.20 m minimum (1 to 3) 3.65 m minimum	NOT PERMITTED	22 500 kg
 (2 to 3) 1.20 m minimum (1 to 3) 4.25 m minimum	NOT PERMITTED	25 000 kg
 (2 to 3) 1.80 m minimum (1 to 3) 4.80 m minimum	NOT PERMITTED	27 000 kg

Minimum refers to axle spacing

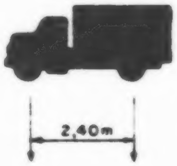
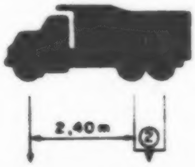
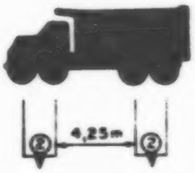
MOTOR VEHICLE ACT 1955

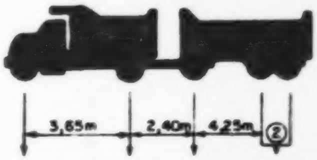
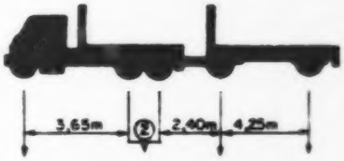
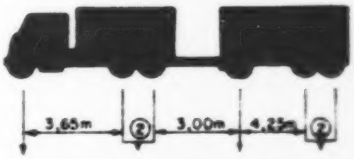
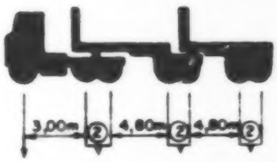
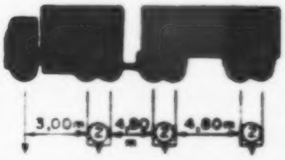
APPENDIX "C"

MAXIMUM ALLOWABLE GROSS MASS AND MINIMUM ALLOWABLE AXLE SPACING

- ALL LOADS ILLUSTRATED ARE MAXIMUM MASS IN KILOGRAMS WITH 4 500 kg MASS ON SINGLE FRONT AXLE
- THE ALLOWABLE GROSS MASS MAY BE INCREASED OR DECREASED FROM THAT INDICATED, WITH MORE OR LESS THAN 4 500 kg ON THE FRONT AXLE
- ALL DIMENSIONS ARE MINIMUM PERMISSIBLE IN METERS

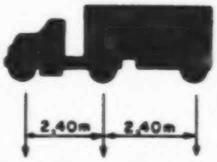
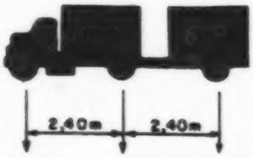
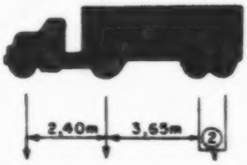
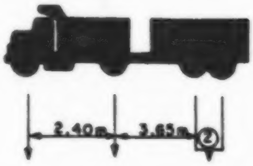
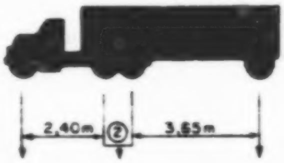
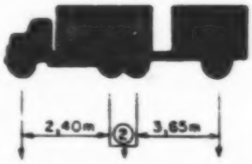
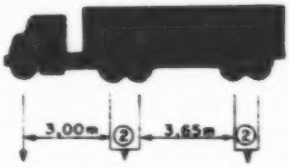
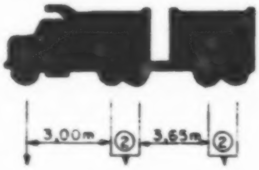
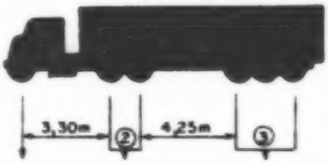
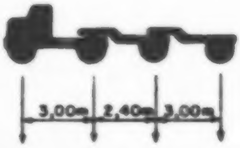
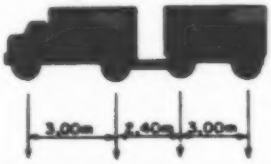
② DENOTES TANDEM MASS AS PER APPENDIX "B"
③ DENOTES TRIPLE MASS AS PER APPENDIX "B"

Configuration and minimum axle spacings	Gross mass range
2 AXLE TRUCK 	13 500
3 AXLE TRUCK 	20 500 to 21 500
DOUBLE TANDEM TRUCK 	32 000 to 34 000

Configuration and minimum axle spacing	Gross mass range
2-F3 UNIT  3,65m 2,40m 4,25m ②	38 500 to 40 500
3-F2 UNIT  3,65m ② 2,40m 4,25m	38 500 to 39 500
3-F3 UNIT  3,65m ② 3,00m 4,25m ②	44 500 to 48 500
3-S2-S2 UNIT OR 3-F4 UNIT  3,00m ② 4,80m ② 4,80m ②  3,00m ② 4,80 ② 4,80m ②	52 500 to 56 500

SX - denotes semi-trailer with X axles.
FX - denotes full trailer with X axles.
X - denotes truck or truck-trailer with X axles.

For configurations not shown in this appendix, application must be made in writing to Department of Transportation for approval on the basis of safety, mass allowance and engineering considerations.

Configuration and minimum axle spacing	Gross mass range
2-S1 UNIT  OR 	22 500
2-S2 UNIT  OR 	29 500 to 31 500
3-S1 UNIT  OR 	29 500 to 30 500
3-S2 UNIT  3,00m ② 3,65m ② OR  3,00m ② 3,65m ②	36 500 to 39 500
3-S3 UNIT  3,30m ② 4,25m ③	41 000 to 48 500
2-S1-S1 UNIT OR 2F-2 UNIT  3,00m 2,40m 3,00m  3,00m 2,40m 3,00m	31 500

MOTOR VEHICLE ACT 1955

MAXIMUM GROSS WEIGHTS

(Part IV - Section 231)

30 (1) In sections 30, 31, 31A and 31B

(a) "articulated vehicle" means a vehicle or combination of vehicles containing one or more joints or articulation;

(b) "axle" means an assembly of two or more wheels whose centres are in one transverse vertical plane;

(c) "axle configuration" means any one combination of all axles, tandems and/or triples mounted on a vehicle or combination of vehicles;

(d) "axle group" means an assemblage of any two or more consecutive axles not including a single steering axle and considered together in determining their combined load effect;

(e) "axle group mass" means the total mass transmitted to the highway by the wheels of an axle group;

(f) "axle spacing" means the longitudinal distance between the centres of any two axles;

(g) "axle mass" means the total mass transmitted to the highway by all wheels of an axle;

(h) "gross axle mass rating" means the value specified by the vehicle manufacturer as the maximum mass capacity of an axle as measured at the tire-ground interfaces;

(i) "gross vehicle mass rating" means the value specified by the vehicle manufacturer as the maximum gross vehicle mass capacity of a single vehicle;

(j) "powered axle" means an axle capable of transmitting a propulsive force to the road surface;

(k) "raw forest product" means a wood product which has been subject to no processing except cutting from the stump, removal of limbs, removal of bark and/or cutting into sections of its original length;

(l) "self-steering axle" means a single axle or a tandem, the wheels of which may be rotated about vertical or near-vertical axis or axes, which axle does not direct the longitudinal motion of the vehicle;

(m) "steering axle" means a single axle or a tandem the wheels of which may be rotated about vertical or near-vertical axis or axes in order to direct the longitudinal motion of the vehicle in which the axle is attached;

(n) "special permit" means any special endorsement relating to mass on a permit or temporary permit issued pursuant to the Act;

(o) "tandem" means an axle group containing two consecutive axles whose centres are not less than 1.20 m apart and are:

(i) attached to the vehicle in such a manner that the load on the axle group is equalized on the two axles,

(ii) each equipped with tires of adequate and equal size,

(iii) equipped with brakes on both axles;

(p) "tandem mass" means the sum of the axle masses on both axles of the tandem;

(q) "triple" means an axle group of three consecutive axles whose extreme centres are not less than 2.40 m apart and are:

(i) attached to the vehicle in such a manner as to equalize the load among the three axles,

(ii) each equipped with tires of adequate and equal size,

(iii) equipped with brakes on each axle;

(r) "triple mass" means the sum of the axle masses on all axles of the triple; and

(s) "wheel mass" means the mass transferred to the ground by the wheel(s) on one side of an axle.

MAXIMUM MASSES

(2) The maximum mass on the front axle of a vehicle shall not exceed the allowable front axle loading set out in Appendix "A" as computed there by reference to the manufacturer's rated tire width for tires installed on the axle.

(3) The maximum mass on any axle, other than a front axle, shall not exceed the sum of the masses computed by multiplying 10.7 kg/mm by the manufacturer's rated tire width for each of the tires installed on the wheels of the axle.

(4) Subject to subsection (2), and notwithstanding subsection (3), the maximum allowable mass

(a) for an axle shall be an axle mass of 9 000 kg;

(b) for those tandems or triples with axle spacing as described in Appendix "B" shall be a tandem or a triple mass as there set out;

(c) for a group of two consecutive axles which do not contribute (sic) a tandem, the centres of which are no more than 1.80 m apart, a maximum axle group mass of 9 000 kg;

(d) for a group of three consecutive axles of the same vehicle, but not including a steering axle, which do not constitute a triple as herein defined the centres of any two of which are not more than 4.80 m apart, shall be a maximum axle group mass of 9 000 kg;

(e) for a tandem not on a trailer or semi-trailer and not containing a steering axle or self-steering axle, shall be a maximum tandem mass of 17 000 kg;

(f) for the steering axle of a vehicle manufactured after December 31, 1978, shall be a maximum mass not exceeding the gross axle mass rating for that steering axle; and

(g) subject to subsection (6), for the steering axle of a vehicle manufactured prior to January 1, 1979, shall be a maximum axle mass of 4 500 kg.

(5) The Registrar may, for the steering axle of a vehicle manufactured prior to January 1, 1979, issue a certificate prescribing a higher maximum axle mass than that set out in paragraph (4)(g) if the owner of the vehicle makes application to the Registrar and supplies him with the manufacturer's certification respecting the gross axle mass rating of the axle and such other information as may be required to determine a proper axle mass.

(6) If the Registrar issues a ceriticate pursuant to subsection (5), the maximum allowable mass for that axle shall be as set out in the certificate of the Registrar.

THE FOR-HIRE TRUCKING INDUSTRY IN THE ATLANTIC PROVINCES

CASE 3

THE TRUCKING INDUSTRY IN THE PROVINCE OF PRINCE EDWARD ISLAND

An Assessment of the Economic and Regulatory
Environment

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Chapter 1

PROFILE OF THE PRINCE EDWARD ISLAND ECONOMY

A brief profile of the Prince Edward Island economy during the study period 1975 to 1978 is presented in this section. This profile is intended to present data on the nature of the economy and the relative importance of various sectors.

1.1 Population and Labour Force

Data on the population estimates for Canada and Prince Edward Island for selected years are shown in Table 1.1. Through the period to 1976, the provincial population was a declining proportion of the Canadian population. The ratio appears to have stabilized by 1978, as the province had the same fraction of the Canadian population that it had in 1971. The increase in the final year is so small that it is impossible to determine whether it actually occurred, or is the result of an error of estimate in intercensusal figures.

Table 1.1

POPULATION: PRINCE EDWARD ISLAND AND CANADA - SELECTED YEARS (thousands)

Year	Prince Edward Island	% Change	Canada	% Change	P.E.I. as a % of Canada
1961	104.6	-	18 238	-	0.57
1966	108.5	3.7	20 141	9.7	0.54
1971	111.6	2.9	21 568	7.1	0.52
1976	118.2	5.9	22 993	6.6	0.51
1978	122.0	3.2	23 483	2.2	0.52

Source: Statistics Canada, 91-201.

Prince Edward Island, similar to other areas in the Atlantic Region, had suffered high rates of out-migration during the 1950's and 1960's. Unlike the result elsewhere, this net emmigration does not appear to have had adverse effects upon the age distribution of the population in Prince Edward Island. In the case of Prince Edward Island, about 33% of the population was under 17 in 1978. Nationally, the figure was 50.3%.

Furthermore, only 11.2% of the Island population was 65 years or over, compared with 14.9% of the total population in Canada. Finally, in the case of Prince Edward Island, 56% of the population fell into the 17 to 64 years of age group, compared with 34.8% at the national level. As a result, while the dependency ratio was 65.2% for Canada, it was only 56% in Prince Edward Island.

Data on the labour force for the province of Prince Edward Island are shown in Table 1.2 for the period 1970 to 1979. During that period, the participation ratio rose from 51.5% to 59.3%, an increase of 7.8 points. As a result, the labour force grew more rapidly than did the labour force population. The former increased by 43.2% over the period, the latter by 23.6%. Employment rose by 30.6%, substantially below the rate of labour force population. As a result, there was a significant increase in unemployment rates, from 5.4% in 1970 to 11.3% in 1979. This would indicate that the trucking industry domiciled in the province of Prince Edward Island should not encounter labour problems in the short term.

Data on employment by industry are shown in Table 1.3 for the period 1976 to 1979. The data are more limited than those available for other provinces, probably because of the size of the labour force. Employment in the agricultural sector was basically constant over the period under review, while that in the non-agricultural sectors rose by 7.9%. Employment in the various sectors of the economy showed limited changes during the period, indicating little structural change in the overall economy. The proportion of employment in the service sectors is somewhat higher in Prince Edward Island than nationally, with the level of employment in the goods-producing sectors consequently somewhat less.

Table 1.2

LABOUR FORCE STATISTICS
(thousands)

YEAR	POPULATION 15+	LABOUR FORCE	EMPLOYED	UNEMPLOYED	UNEMPLOYMENT RATE	PARTICIPATION RATE
1970	72	37	35	2	5.4	51.5
1971	74	40	37	3	7.5	54.1
1972	75	41	36	5	12.2	54.7
1973	78	43	40	3	7.0	54.6
1974	80	45	41	4	8.9	55.5
1975	81	46	42	4	8.0	56.5
1976	83	47	42	5	10.6	56.7
1977	85	48	44	4	8.3	57.0
1978	87	50	45	5	9.9	57.8
1979	89	53	47	6	11.3	59.3

Source: Statistics Canada, 71-001.

Table 1.3

EMPLOYED BY INDUSTRY
(thousands)

Industry	1976	1977	1978	1979
Agriculture	6	6	5	6
Non-Agriculture	38	39	42	41
Manufacturing	-	-	5	4
Construction	4	4	5	4
Trade	8	8	8	8
Transportation, etc.	4	4	5	4
Services	13	13	14	13
Public Admin/ Defence	4	4	4	4

Source: Statistics Canada, 71-001

1.2 Personal Income, Value Added and Investment

Information on personal income per capita for Prince Edward Island, Ontario and Canada for selected years is shown in Table 1.4. The data reveal an overall tendency toward a narrowing of the relative gap in personal income per capita between Prince Edward Island on the one hand and Ontario and Canada on the other. There was a narrowing up to 1975, a slight widening to 1977, and a narrowing again to 1979. At the same time, it must

Table 1.4

PER CAPITA PERSONAL INCOME:
PRINCE EDWARD ISLAND, ONTARIO AND CANADA -
SELECTED YEARS
(dollars)

Year	Prince Edward Island	Ontario	Canada	P.E.I. as a % of Ontario	P.E.I. as a % of Canada
1965	1 257	2 436	2 091	51.6	60.1
1970	2 082	3 705	3 129	56.2	66.5
1975	4 214	6 596	6 001	63.9	70.2
1977	4 967	8 045	7 361	61.7	67.5
1979	6 100	9 605	8 887	63.7	68.6

Source: Statistics Canada, 13-201.

be noted that in absolute terms, the situation was different, with the actual dollar gap increasing through time. The Canada - Prince Edward Island gap was, for example, $834 in 1965. By 1979, this gap had increased to $2 787, or 3.34 times. Notwithstanding the narrowing of the relative gap, the absolute gap has been increasing.

Data on the value added of the various goods-producing industries in Prince Edward Island for the period 1972 to 1978 are shown in Table 1.5. These data are in nominal dollars, and reveal a considerable overall growth for the period, although there was considerable fluctuation within individual sectors. The manufacturing sector exhibited steady growth, expanding in nominal terms each year. With the exception of the years 1973 to 1975, fisheries did as well as the other sectors. The agricultural sector expanded to 1974 and has had a cyclical pattern since that time, never yet achieving the value of output in 1974. The construction sector declined from 1973 to 1976 and then expanded again. Construction aside, agriculture has been the dominant industry, and this trend most likely will continue into the immediate future. It should be noted that transport associated with the agricultural sector has shifted significantly from rail to truck over this period.

Public and private investment data for the period 1973 to 1979 are shown in Table 1.6. Between these two years, new capital expenditures in the Prince Edward Island economy increased by 45.7%, while the total of new repair expenditure rose by 51.7%. Housing expenditures were consistently the largest component of the total, accounting for 28.6% of the overall total in 1979. Investment expenditures by government departments followed, accounting for a further 20.8% on the total in the final year. The primary and construction sectors ranked third, making up 18.7% of the final year's total. On the other hand, investment in the manufacturing sector was consistently low, averaging $6.6 million over the period, and contributing only 2.9% of the total new and repair expenditure in 1979. These tendencies suggest that the structure of the Prince Edward Island economy is unlikely to change significantly over the next few years.

1.3 Output in Specific Sectors

This section of the economic profile will briefly examine some of the data which are available on the outputs of the various sectors making up the Prince Edward Island economy.

Data on farm cash receipts, covering the period 1973 to 1979, are set out in Table 1.7. The data suggest a change in the structure of the sector in Prince Edward Island, with livestock and their products displacing crops as the major source of farm cash receipts. In the first part of the period under review, that is, up to and including 1976, field crops dominated the sector. In the last three years, however, they were displaced by the livestock category. While some of the change has been caused by the decline in the value of receipts generated by the farmer, it should be noted that the value of the latter almost doubled, with two-thirds of the growth coming in the 1977 to 1979 time span.

Data on the fisheries sector are shown in Table 1.8 for the period 1973 to 1978. In the aggregate, there has been a considerable increase in the value of the sector's output. In volume terms, however, the 1979 totals

Table 1.5

CENSUS VALUE ADDED IN GOODS-PRODUCING INDUSTRIES AND PERCENTAGE ANALYSIS, 1972-1978 - PRINCE EDWARD ISLAND

	1972		1973		1974		1975		1976		1977		1978	
Agriculture	20 592	22.6	46 953	31.2	69 396	40.3	35 318	24.8	67 105	37.8	46 515	27.8	52 666	22.9
Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fisheries	10 134	11.1	12 415	8.2	12 027	7.0	12 415	8.7	12 723	7.2	15 164	9.1	23 376	10.9
Trapping	70	0.1	72	-	145	0.1	70	-	105	0.1	126	0.1	192	0.1
Mining	390	0.4	199	0.1	-	-	-	-	-	-	-	-	-	-
Electric Power	5 315	5.8	5 714	3.8	6 459	3.8	7 254	5.1	10 246	5.8	7 038	4.2	12 653	5.5
Manufacturing Industry	24 755	27.2	29 090	19.3	33 524	19.5	36 741	25.8	41 500	23.4	44 989	26.9	63 445	27.6
Construction	29 917	32.8	56 254	37.3	50 430	29.3	50 577	35.5	45 853	25.8	53 380	31.9	77 648	33.8
Grand Total	19 173	100.0	150 697	100.0	172 105	100.0	142 375	100.0	177 532	100.0	167 212	100.0	229 980	100.0

Source: Statistics Canada, 61-202.

Table 1.6

PUBLIC AND PRIVATE INVESTMENT BY TYPE AND BY INDUSTRY
($ million)

By Type	1973	1974	1975	1976	1977	1978[1]	1979[2]
New Construction	97.9	84.3	82.9	74.4	96.8	118.4	132.9
New Machinery	26.0	34.0	34.8	32.0	47.3	45.8	47.6
Total New Capital Expenditure	123.9	118.3	117.7	106.4	144.1	164.2	180.5
Repair Expenditure on Construction	17.4	19.4	24.5	21.0	26.7	26.4	28.4
Repair Expenditure on Machinery	9.4	10.5	12.5	13.8	17.3	18.8	19.7
Total New and Repair Expenditure	150.7	148.2	154.7	141.2	188.1	209.4	228.6
Totals by Industry							
Primary Industries and Construction	18.4	22.8	29.3	28.1	37.4	39.5	42.8
Manufacturing	4.1	6.1	4.7	5.9	10.5	7.7	7.4
Transportation	0.7	0.8	1.4	1.1	1.6	2.6	3.2
Communication	6.5	9.5	9.6	9.6	13.0	12.0	13.4
Miscellaneous Utilities	5.8	3.4	5.6	7.0	5.2	5.1	5.6
Trade	3.6	7.2	3.5	3.5	3.8	4.8	5.9
Finance	9.5	5.1	2.3	1.8	6.0	12.9	11.4
Commercial Services	3.1	3.7	5.5	4.4	5.1	5.9	7.0
Institutions	11.1	13.2	17.5	11.9	11.0	11.8	19.0
Government Departments	29.4	22.8	35.8	30.8	51.4	44.4	47.5
Housing	58.5	53.6	39.5	37.1	43.1	62.7	65.4
TOTAL	150.7	148.2	154.7	141.2	188.1	209.4	228.6

[1] Preliminary actual figures for 1978

[2] Revised intentions for 1979

Source: Statistics Canada, 61-206.

Table 1.7

FARM CASH RECEIPTS

(x $1 000)

Commodity	1973	1974	1975	1976	1977[r]	1978[r]	1979[p]
Oats	79	103	105	114	108	99	136
Potatoes	31 262	41 620	24 961	48 855	31 100	26 700	30 700
Fruit	484	627	750	616	687	1 190	715
Vegetables	1 399	1 637	2 465	1 814	1 420	2 240	2 420
Other Crops[1]	5 687	6 892	6 094	7 508	7 050	7 160	8 530
Total Crops	38 911	50 879	34 375	58 907	40 300	37 400	42 500
Cattle & Calves	11 404	9 993	14 281	12 563	14 600	17 500	22 500
Hogs	11 463	10 349	12 803	12 514	12 600	16 800	18 100
Sheep & Lambs	72	107	91	107	120	135	175
Dairy	6 696	8 190	11 192	12 008	12 600	14 000	16 000
Poultry	415	591	513	771	615	974	1 100
Eggs	1 387	1 531	1 612	1 762	1 890	1 890	2 000
Other Livestock & Products	506	529	712	736	911	1 100	1 210
Total Livestock & Products	31 943	31 290	41 204	40 461	43 300	53 000	61 000
Other Cash Receipts[2]	2 304	3 358	9 322	4 087	4 540	7 580	8 200
Total Cash Receipts	73 158	85 527	84 901	103 455	88 200	98 000	112 000

r revised
p projections

[1] Floriculture and nursery are included in other crops.

[2] Other cash receipts are made up of forest and maple, dairy subsidy, deficiency payments, and provincial stabilization payments.

Note: 1977-1979 figures have been rounded to three significant digits and thus the totals may not add up due to rounding.

Source: P.E.I., Department of Agriculture & Forestry.

Table 1.8

FISH LANDINGS AND VALUE

(millions)

Year	Groundfish		Pelagic & Estuarial		Lobster & Shellfish		Irish Moss		Total	
	Weight (lbs.)	Value ($)	Weight (lbs.)	Value ($)	Weight (lbs.)	Value ($)	Weight (lbs.)	Value ($)	Weight (lbs.)	Value ($)
1973	38.5	2.1	14.0	0.9	10.3	8.2	49.1	1.2	112.0	12.4
1974	17.1	1.1	9.7	0.8	8.8	7.0	76.0	3.1	111.7	12.0
1975	14.9	1.1	5.4	0.5	11.4	9.1	41.7	1.6	73.4	10.7
1976	15.0	1.1	7.0	1.1	11.3	9.7	28.8	0.9	62.1	12.7
1977	22.5	2.1	5.5	1.2	11.8	10.8	30.1	1.1	70.0	15.2
1978	28.7	3.2	8.8	1.6	15.2	17.9	31.7	1.9	84.5	24.6
1979$_p$	38.3	4.3	13.9	2.2	16.9	20.5	42.6	2.6	111.8	29.6

p preliminary

Source: P.E.I., Department of Fisheries; Statistics Canada, 11-003 and 24-203.

were not substantially different from those in 1973. Volumes declined from 1973 to 1976, and have steadily increased since that time. Both the groundfishery and the pelagic and estuarial fishery exhibited the same pattern as the sector, though they reached the bottom of their cycles a year sooner. In volume terms, the lobster and shellfish group increased about 60% over the period, with most of the increase coming in 1978 and 1979. Irish moss reached a production high of 76.0 million pounds in 1974, fell to a low of 28.8 million pounds in 1976 and has increased since that time. It seems highly unlikely that there will be significant increases in these volumes in the immediate future. In any case, given the amounts involved, increases in the catch volumes would have little significant impact upon the transportation sector. A significant shift to road transport has already occurred in this sector of the economy.

Data on the value added of the manufacturing sector of the Prince Edward Island economy are shown in Table 1.9 for the years 1973 and 1977. In the aggregate, value added in the sector increased by 57.6% over the period. The food and beverage industry dominates the sector, accounting for 73.1% of total value added in 1973 and 74.7% in 1977. The printing, publishing and allied industries follows, and accounted for 8.5% of the sector's value added in the initial year. Separate data are not available on this industry for 1977. Machinery and wood industries accounted for 2.7% and 2.4%, respectively, of total value added in 1977. Overall, one would have to conclude that there has been little structural change in the manufacturing sector, and, in fact, only modest real growth in the period 1973 to 1977.

In summary, while there will be real growth in at least some of the economic sectors in Prince Edward Island over the next few years, there appears to be few implications for the trucking industry. Significant increases in volumes can not be expected to occur, either inbound or outbound, in the foreseeable future.

1.4 Summary and Conclusions

This chapter has briefly reviewed the economy of the province of Prince Edward Island to provide background for the analysis of the trucking industry which follows.

The review began by considering the human resource side. The population of Prince Edward Island has been a declining fraction of the Canadian population, though it appears that the decline has stopped in the last decade. During the 1970's, the labour force participation ratio increased in Prince Edward Island by 7.8 points to 59.3. There was growth in the volume of employment as well, but at rates well below the growth of the labour force. As a consequence, the unemployment rate rose sharply, reaching 11.3% in 1979. During the 1970's, there was little if any change in the sectoral distribution of employment in the Prince Edward Island economy.

Personal income per capita rose sharply in the 1970's and the relative income gap between the province of Prince Edward Island on the one hand, and Ontario and the national average on the other, narrowed. However, in absolute terms, income disparities widened during the period under review.

Table 1.9

VALUE ADDED IN MANUFACTURING ACTIVITY
BY MAJOR GROUP AND INDUSTRY
1973-1977

(x $1 000)

Industry	1973	1977
Food & Beverage Industry	19 499	31 394
Fish Products Industry	5 741	6 990
Dairy Products Industry	2 998	7 637
Other Food & Beverage	10 760	16 767
Wood Industries	615	1 002
Furniture & Fixtures Industry	x	32
Printing, Publishing & Allied Industries	2 275	x
Machinery Industries	x	1 119
Non-metallic Mineral Products Industries	79	402
Miscellaneous Manufacturing Industries	x	x
Total All Industries	26 662	42 016

x confidential

Source: Statistics Canada, 31-203.

A review of the capital investment patterns for the period 1972 to 1978 suggests that there will be little change in the structure of Prince Edward Island economy in the foreseeable future. Manufacturing investment, particularly, has been low, and must be increased if structural change is to take place.

An examination of the pattern of farm cash receipts reveals that within the agricultural sector, there was some change in the 1970's. There appears to have been a shift away from field crops in the direction of livestock and livestock products occurring about the middle of the decade. However, field crops will continue to account for a major share of this sector and the transport element has shifted significantly to road. In the fisheries sector, there has been little overall change in volumes, though the mix of outputs has changed. This has resulted in a rising value of total sectoral output. It seems highly unlikely that there will be significant increases in the volume of landings in the immediate future, and, consequently, little in the way of additional traffic flows. A review of the manufacturing sector reveals that the food and beverages group dominated, accounting for almost 75% of the sector's value added in 1977. Over the period, there was only modest growth in the sector, a trend which appears likely to continue into the future.

Overall, while there will be some real growth in the various sectors of the Prince Edward Island economy over the course of the next few years, significant changes in traffic volumes, either inbound or outbound, are not foreseen. As a result, there appear to be few implications for the trucking industry either domiciled or operating in that jurisdiction.

Chapter 2

AN OVERVIEW OF THE PRINCE EDWARD ISLAND TRUCKING INDUSTRY

2.1 Introduction

In attempting to statistically identify the nature of the trucking industry in Prince Edward Island, it is necessary to confront the general lack of sufficient data to be very definitive about the results. This, of course, is consistent with the data limitations within the remainder of Canada, with respect to trucking.

Within Atlantic Canada, two major surveys were conducted in the late 1970's to determine characteristics of the trucking industry. These were the 1976 Truck Origin-Destination Survey and the 1979 Highway Origin-Destination Survey. The results of both of these surveys are used to develop an understanding of the Prince Edward Island industry.

2.2 Truck Origin-Destination Studies

In 1976, the federal departments of Transport and Regional Economic Expansion, in co-operation with the departments of Transportation and Highways of the four Atlantic provinces, designed and conducted a major truck Origin-Destination Study throughout Atlantic Canada. The primary objective of the study was to aid in the development and assessment of the effects of a federally funded primary highways program. Within this study, basic information, with respect to the nature and volume of truck traffic using the primary highway system in Atlantic Canada, was to be obtained.

It should be noted that the primary objective of this study was not the identification of freight movements by truck. It was, however, designed to determine the nature of trucks and truck movements on the regions' highways. The study was, therefore, largely aimed at gathering information related to pavement strength requirements (i.e., truck weights, sizes, loads, configurations, etc.). The use of these data for an analysis of the economic nature of the industry was not intended and makes its use largely speculative.

The survey period covered a full seven days from August 23 to August 29, 1976, at major truck scales and selected locations on the primary and arterial highway systems throughout the regions. The survey was conducted for seven consecutive days, twenty-four hours per day. The province of Prince Edward Island conducted the survey within that province utilizing its own manpower resources. The interview form, illustrated in Figure 2.2.1, indicates the nature of the survey and the questions asked during the roadside interview. In Prince Edward Island, truck traffic was polled at the following six locations:

(1) Borden
(2) Miscouche
(3) Traveller's Rest
(4) Marshfield
(5) Wood Islands
(6) Card-Ross

The use of this survey for an examination of the Prince Edward Island trucking industry has a number of inherent problems. It must be emphasized that these faults are related to the particular use in this project rather than the surveys intended use and should not be, therefore, interpreted as criticism of the survey itself. From the point of view of this study, the survey suffers from the following limitations:

(a) Origins and destinations internal to the region were not established, rather the points at which traffic entered the region were considered to be the trip origins and/or destinations;

(b) The classification of goods recorded in the interview was very basic and few commodity examinations were possible; and

(c) A commodity flow is difficult to estimate due to the seasonal nature of most commodity shipments and the intensive seven-day nature of the survey.

Since it was a primary highway survey, it was rather a "broad brush" in nature. No attempt was made to examine in detail all trucking movements. The study was orientated toward obtaining major traffic movements on the arterial system. These movements of a local nature were not evaluated in a detailed manner.

2.2.1 Review of the 1976 Study

Considering the limitations of the data as previously presented, the 1976 data reveals significant information relative to the trucking industry in Prince Edward Island that had formerly been identified. It is the purpose of this section of the report to review these elements of that study and those facets of the Prince Edward Island trucking industry identified in these data.

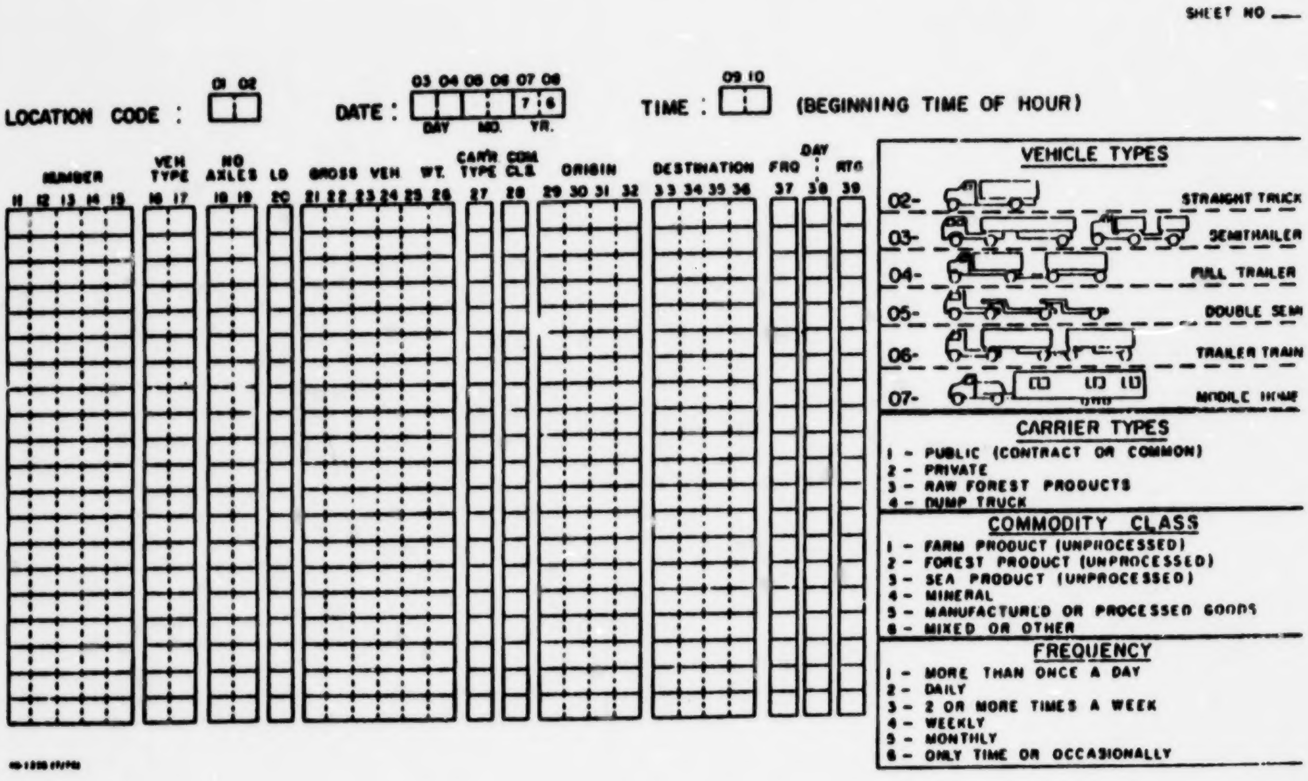
Commodities

Six commodity classes were presented in the 1976 data. The trucking activity, by commodity, is summarized in Table 2.2.1 which shows the number of movements by commodity type on an annual basis both intraprovincially and interprovincially. Again caution is warranted when using the numbers, especially the intraprovincial traffic. In this sampling, a large proportion of local short-haul traffic would be missed.

These data are useful in gaining some insight into the extent of interprovincial trucking in the province of Prince Edward Island. It is also useful in identifying the relative importance of trucking in the

Figure 2.2.1

ATLANTIC PROVINCES
1976 TRUCK ORIGIN-DESTINATION SURVEY



SHEET NO ___

LOCATION CODE : 01 02 ☐☐

DATE : 03 04 05 06 07 08 ☐☐ ☐☐ 7 6 (DAY MO. YR.)

TIME : 09 10 ☐☐ (BEGINNING TIME OF HOUR)

NUMBER	VEH TYPE	NO AXLES	LD	GROSS VEH WT.	CARR TYPE	COM CLS	ORIGIN	DESTINATION	FRQ	DAY	RTG
11 12 13 14 15	16 17	18 19	20	21 22 23 24 25 26	27	28	29 30 31 32	33 34 35 36	37	38	39

VEHICLE TYPES

- 02- STRAIGHT TRUCK
- 03- SEMITRAILER
- 04- FULL TRAILER
- 05- DOUBLE SEMI
- 06- TRAILER TRAIN
- 07- MOBILE HOME

CARRIER TYPES

1 - PUBLIC (CONTRACT OR COMMON)
2 - PRIVATE
3 - RAW FOREST PRODUCTS
4 - DUMP TRUCK

COMMODITY CLASS

1 - FARM PRODUCT (UNPROCESSED)
2 - FOREST PRODUCT (UNPROCESSED)
3 - SEA PRODUCT (UNPROCESSED)
4 - MINERAL
5 - MANUFACTURED OR PROCESSED GOODS
6 - MIXED OR OTHER

FREQUENCY

1 - MORE THAN ONCE A DAY
2 - DAILY
3 - 2 OR MORE TIMES A WEEK
4 - WEEKLY
5 - MONTHLY
6 - ONLY TIME OR OCCASIONALLY

Table 2.2.1

1976 PRINCE EDWARD ISLAND TRUCKING COMMODITY SUMMARY

Commodity	Intraprovincial Movements	Interprovincial Movements		
		Originating in P.E.I.	Destined to P.E.I.	Total
Unidentified	115 580	27 422	17 261	44 683
Farm Products	18 174	4 766	2 696	7 462
Forest Products	3 257	3 599	2 199	5 998
Sea Products	4 353	2 525	922	3 447
Mineral	33 412	879	8 273	9 152
Manufactured goods	48 346	13 227	31 083	44 310
Mixed/Other	34 578	4 220	7 676	11 896
TOTAL	258 700	56 618	70 110	126 728

shipment of various commodities. In Table 2.2.1, 56% of the goods shipped by truck were identified as being in the five commodity groupings as shown. The remaining 44% were either unidentified or classed as mixed or other.

2.2.2 The 1979 Origin-Destination Survey

Prince Edward Island was involved in the 1979 Origin-Destination Study along with the other three Atlantic Provinces. Again, the Department of Highways was responsible for the collection and analysis of data. The 1979 survey looked at all traffic using the province's highway system of which trucks were only one component.

The 1979 survey was conducted using roadside interviews at the following seventeen stations:

(1) Woodstock
(2) Miscouche
(3) Bedeque
(4) Borden
(5) Pleasant Valley
(6) Stanley Bridge
(7) Cymbria
(8) New Haven
(9) Milton
(10) Marshfield
(11) Hazelbrook
(12) Wood Islands
(13) Brudenell
(14) Souris
(15) Elmsdale
(16) New Annan
(17) Brookvale

This compares with the six roadside interview stations that were used in the 1976 Study. Interviews were conducted at each location for one, 12-hour day for each of two separate study periods. The study periods were the summer period and the fall period. The use of this sampling technique provided some 38 000 interviews on Prince Edward Island highways of all types of road users including trucks. While it does not have as large a truck sample as did the 1976 survey, conducting it over a longer period of time would remove a seasonal bias especially in the consideration of commodity flows.

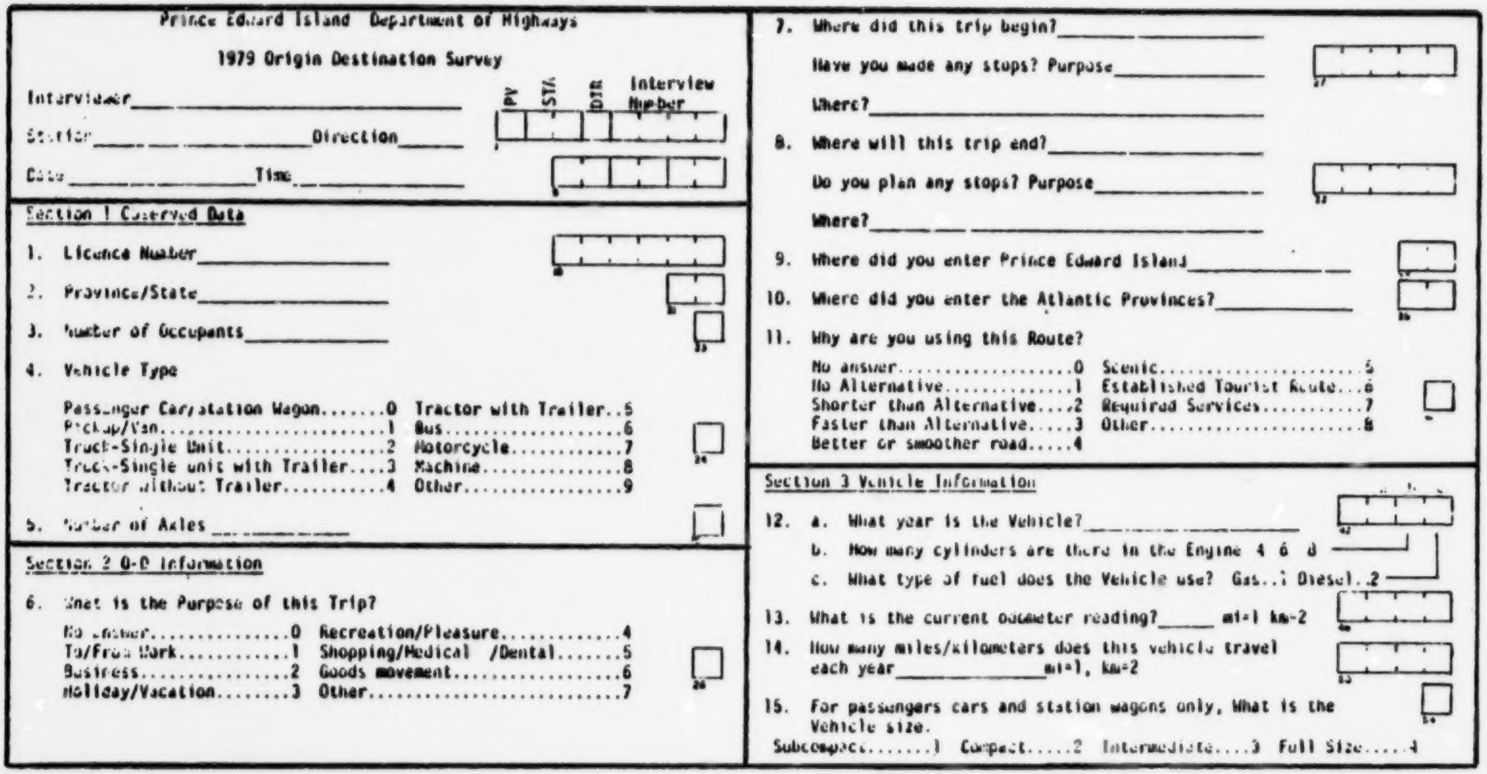
The survey was conducted with an interview form as illustrated in Figure 2.2.2. The survey was aimed at all travellers and a major part of the survey had to do with tourism and general highway safety issues. With respect to trucking, the survey simply queries the weight, commodity, and carrier classification. The survey accounted for the true origins and destinations of the trip, not only where they entered the Atlantic Provinces. As well, the Statistics Canada 3-digit Commodity Code and Classification (STCC Commodity Group) was used to identify the commodity.

A simple comparison of the 1976 and 1979 data is illustrated in Table 2.2.2. These data show the comparison of projected annual volumes of 1976 and 1979 truck trips from the respective surveys.

Table 2.2.2 indicates expected differences in the volumes of truck traffic. Perhaps of most significance is the difference in the volumes of intraprovincial truck traffic between the two surveys. This difference should be expected considering the increased number of interview stations in the 1979 survey and the resulting propensity to identify more local trips.

Figure 2.2.2

1979 ORIGIN-DESTINATION STUDY



Prince Edward Island Department of Highways

1979 Origin Destination Survey

Interviewer______________________ PV STA DIR Interview Number ☐☐☐☐☐☐☐☐

Station______________Direction_____

Date______________Time______________ ☐☐☐☐

Section 1 Observed Data

1. Licence Number________________ ☐☐☐☐☐☐

2. Province/State________________ ☐☐

3. Number of Occupants____________ ☐

4. Vehicle Type ☐

Passenger Car/station Wagon.......0	Tractor with Trailer..5
Pickup/Van.........................1	Bus....................6
Truck-Single Unit..................2	Motorcycle.............7
Truck-Single unit with Trailer....3	Machine................8
Tractor without Trailer...........4	Other..................9

5. Number of Axles __________ ☐

Section 2 O-D Information

6. What is the Purpose of this Trip? ☐

No answer..............0	Recreation/Pleasure............4
To/From Work...........1	Shopping/Medical /Dental.......5
Business...............2	Goods movement.................6
Holiday/Vacation.......3	Other..........................7

7. Where did this trip begin?_______________

Have you made any stops? Purpose____________ ☐☐☐☐

Where?_______________________

8. Where will this trip end?_______________

Do you plan any stops? Purpose____________ ☐☐☐☐

Where?_______________________

9. Where did you enter Prince Edward Island______________ ☐☐

10. Where did you enter the Atlantic Provinces?____________ ☐☐

11. Why are you using this Route? ☐

No answer..................0	Scenic.....................5
No Alternative.............1	Established Tourist Route...6
Shorter than Alternative....2	Required Services..........7
Faster than Alternative.....3	Other......................8
Better or smoother road.....4	

Section 3 Vehicle Information

12. a. What year is the Vehicle?________________ ☐☐☐

b. How many cylinders are there in the Engine 4 6 8

c. What type of fuel does the Vehicle use? Gas..1 Diesel..2

13. What is the current odometer reading?_____ mi=1 km=2 ☐☐☐☐

14. How many miles/kilometers does this vehicle travel each year_____________mi=1, km=2 ☐☐☐☐

15. For passengers cars and station wagons only, What is the Vehicle size. ☐

Subcompact.......1 Compact.....2 Intermediate....3 Full Size.....4

Section 4 Tourist Vehicles

16. How many days did or will you stay on Prince Edward Island?__________Days ☐☐

How many days did or will you stay in the Atlantic Provinces?________Days ☐☐

17. What type of Accomadations did or will you use? ☐

No answer............0 Trailer/R.V.............4
Motel/Hotel..........1 Cottage..................5
Relatives/Friends....2 Tourist Home/Farm.......6
Camping/Tenting......3 Other...................7

18. If Camping/Tenting/Trailer, where do you plan to camp tonight? ☐

No answer............0 Friends/Relatives........4
Provincial Park......1 No Plans.................5
National Park........2 Other....................6
Private Campground...3

Section 5 Safety Equipment

19. Is Driver wearing a seat belt? ☐

No answer.........0 Not wearing seat belt........2
No seat belt......1 Wearing seat belt............3

Number of Front Seat Passengers wearing seat belts?_______ ☐

Number of Rear Seat Passengers wearing seat belts?________ ☐

20. Number of small children in vehicle?___________ ☐

Number of child restraints in vehicle?_________ ☐

Number of child restraints in use?_____________ ☐

Section 6 Commercial Vehicles

21. What is the present weight of this unit? ☐☐☐☐☐

lbs = 1, kg = 2

_____________Approximate = 1, Weighed = 2

What is the empty weight of this unit? ☐☐☐☐☐

lbs = 1, kg = 2

_____________Approximate = 1, weighed = 2

22. What type of products are on the unit? ☐☐☐

____

23. How is the vehicle registered? ☐

No answer..............0 Government........3
Private Carrier........1 Farm Vehicle......4
Public Carrier.........2 Other.............5

Table 2.2.2

ANNUAL TRUCK TRAFFIC COMPARISON,
1976 AND 1979 SURVEYS

Truck Traffic Category	Annual Volumes	
	From 1976 Survey	From 1979 Survey
Intraprovincial	258 700	740 730
Interprovincial		
- originating in P.E.I.	56 618	51 148
- destined to P.E.I.	70 110	45 759
- through P.E.I.	1 418	7 324

In this table, it is expected that the relatively high numbers in the 1976 survey could be due to some double counting of vehicles that were stopped at more than one survey station.

There is a relatively modest volume of traffic through Prince Edward Island, presumably to the Magdalen Islands. The differences in the results are probably due to errors associated with capturing a small sample. Intuitively, the 1976 result appears to be low while the 1979 number appears to be too high.

A commodity analysis of the 1979 data is illustrated in Table 2.2.3 where a similar intra/interprovincial mix of traffic is illustrated by commodity. The commodities have been regrouped from the STCC commodities and are defined in Appendix A. Of note here is the improved identification of commodities over the basic classification system used in the 1976 study. In this survey, 40% of the traffic was identified by commodity. The listing of these commodities illustrates the relative importance of trucks to the movement of these specific commodities.

An extension of the origin-destination data is presented in terms of the volumes of each commodity moved by truck in Prince Edward Island during 1979. Table 2.2.4 illustrates the volume of each commodity moved inter and intraprovincially in thousands of tons. It can be seen that, in terms of volume of tonnage of goods, relatively few commodities dominate the trucking activity on Prince Edward Island roads. Of particular importance are crude non-metal (i.e., gravel, fill), machinery and manufactured goods and foodstuff.

A further analysis of the 1979 origin-destination data is presented in Table 2.2.5. In this table, the Prince Edward Island interprovincial truck traffic is tabulated by volumes of individual commodities. In this table, the volumes of commodity traffic between P.E.I. and other points is

Table 2.2.3

INTER/INTRAPROVINCIAL COMMODITY FLOW ANALYSIS

Commodity	Projected 1979 Truck Trips	Intraprovincial (%)	Interprovincial		
			Originating In P.E.I. (%)	Destined To P.E.I. (%)	Through P.E.I. (%)
Unidentified	427 118	-	-	-	-
Manufactured Goods	93 409	89.2	3.8	5.6	1.4
Crude Non-metal	78 841	91.1	3.6	5.1	1.0
Crude Wood	6 183	77.2	8.4	14.3	-
Petroleum Products	47 154	97.0	1.0	1.0	1.0
Metal Products	38 538	83.6	2.8	13.4	0
Dairy Products	20 628	95.2	1.5	3.3	0
Wood Products	19 939	87.6	2.3	8.6	1.5
Feed	12 134	76.7	10.7	9.0	3.6
Grains	11 899	88.5	0.5	11.5	0
Fish	9 459	76.4	11.6	11.9	0
Beverages	7 018	82.2	4.0	13.6	0
Crude Wood	6 183	77.2	8.4	14.3	0
Meat	5 882	84.1	3.2	12.6	0
Chemicals	3 169	60.0	14.1	25.9	0
TOTAL	844 961				

Table 2.2.4

VOLUME OF GOODS SHIPPED BY TRUCK IN PRINCE EDWARD ISLAND

(1 000 tons)

Commodity	Projected 1979 Truck Trips	Intraprovincial	Interprovincial		
			Originating In P.E.I.	Destined To P.E.I.	Through P.E.I.
Unidentified	523	286	120	109	8
Crude Non-metal	1 247	1 075	41	114	17
Machinery & Manufactured Goods	717	630	36	50	2
Foodstuffs	567	350	175	37	5
Petrol Products	383	358	8	3	14
Metal Products	363	251	21	90	0
Dairy Products	100	84	7	9	0
Feed	77	56	12	9	0
Wood Products	75	51	4	19	0
Beverages	72	44	0	28	0
Fish	69	47	12	10	0
Crude Wood	43	24	8	11	0
Grains	36	34	0	2	0
Meat	36	23	11	2	0
Chemicals	27	12	9	5	0

Table 2.2.5

PRINCE EDWARD ISLAND INTERPROVINCIAL TRUCK TRAFFIC

(1 000 tons moved by truck)

Commodity	Tons of Goods Shipped	N.S.	N.B.	Nfld.	QC	Ont. & West	U.S.A.	P.E.I. Imp/Exp Ratio
Foodstuffs	217	34.0	126.0	13	18	2	18	4.720
Crude Non-metal	172	109.0	64.0	-	-	-	-	0.350
Metal Products	112	40.0	63.0	-	-	8	-	0.230
Machinery & Manufactured Goods	87	15.0	70.0	2	-	1	-	0.720
Beverages	28	3.0	24.0	-	-	-	-	0.000
Petroleum Products	25	3.0	23.0	-	-	-	-	2.600
Wood Products	24	8.0	13.0	-	3	-	-	0.000
Fish	22	3.0	11.0	-	-	-	7	1.200
Feed	21	4.0	17.0	-	-	-	-	1.330
Crude Wood	19	17.0	2.0	-	-	-	-	0.720
Dairy Products	16	1.0	14.0	-	-	-	-	0.777
Chemicals	15	2.0	5.0	-	-	7	-	1.800
Meat	13	1.5	11.5	-	-	-	-	5.500
Unidentified	229	20.0	103.0	-	74	6	18	0.908

presented together with the ratio of goods shipped into Prince Edward Island to goods shipped out of the province by truck. This ratio is called "Prince Edward Island Import/Export Ratio" and is examined for each commodity. A ratio of less than 1.0 would indicate that Prince Edward Island is a net importer of that commodity.

In Table 2.2.5, the majority of interprovincial truck shipments appears to be centered in New Brunswick and Nova Scotia. It is suspected that this is a function of the terminal locations of many trucking companies. A trucking company may be picking up a trailer in Moncton for delivery to a terminal in Charlottetown. In fact, that vehicle trip origin and destination are recorded while the true origin and destination of the shipment, (i.e., the trailer) might be completely different. It should be remembered that this fact would cause a significant understatement of long-haul trucking.

These origin-destination studies are a means of identifying certain elements and patterns associated with the trucking industry. However, due to the utilization of a very small sample as compared to the population, one should exercise caution in the use of the data. The preceding tables attempt to identify some patterns. It is also considered that the data are better able to identify truck trips than the journey of a commodity.

The foregoing analysis seems to illustrate that the best data available at present to describe the trucking industry in Prince Edward Island has significant limitations. The surveys to date describe the movement of trucks but not the movement of the trailer. The information on commodities is limited with a significant proportion not identified. It is concluded that both of the O-D surveys accomplish their stated objectives. However, they are of limited value for other purposes. Certainly, a waybill sampling plan would be preferable for an ongoing picture of goods movement.

2.3 Growth of the Prince Edward Island Trucking Industry

Trucking in Prince Edward Island has developed into a major mode of local and inter-city freight movement similar to its development in the rest of North America.

In a 1962 publication [1], a growth of 460% in trucking registrations was observed for Canada during that 20 year period or an annual growth rate of 5%. Later work by Steeves [2] published in 1969 examined the decade from 1957 to 1967 and recorded a 32% increase in that decade in new truck registrations in Canada. This indicates that a slower annual rate of growth of 2.8% was observed in the 1960's.

For similar information regarding Prince Edward Island, Statistics Canada - Motor Vehicle Registration Statistics were examined to illustrate the growth in trucking over a 20 year period. The results of this investigation are contained in Table 2.3.1. These figures show the total number of trucks registered in the province for the years 1960 to 1979 inclusive. These data include all trucks including the many light trucks and vans that have grown popular during recent years.

Table 2.3.1

PRINCE EDWARD ISLAND TRUCK REGISTRATIONS

Year	Trucks Registered (total)
1960	10 850
1961	11 615
1962	11 669
1963	11 869
1964	10 597
1965	7 853
1966	8 180
1967	8 579
1968	8 721
1969	8 931
1970	9 164
1971	9 200
1972	9 796
1973	10 370
1974	11 685
1975	12 721
1976	13 700
1977	15 044
1978	16 887
1979	18 498

Of note in Table 2.3.1 is the apparent drop in truck registrations in 1965. This, of course, is due to a licensing classification change. Prior to this date, all farm tractors were registered as commercial vehicles in Prince Edward Island. This amounted to approximately 3 200 vehicles per year being dropped.

A breakdown of the trucks registered by size category in Prince Edward Island for 1981 is given in Table 2.3.2. It is uncertain whether these figures reflect a decrease in total registrations.

Table 2.3.2

BREAKDOWN OF TRUCK REGISTRATIONS BY SIZE
(1981)

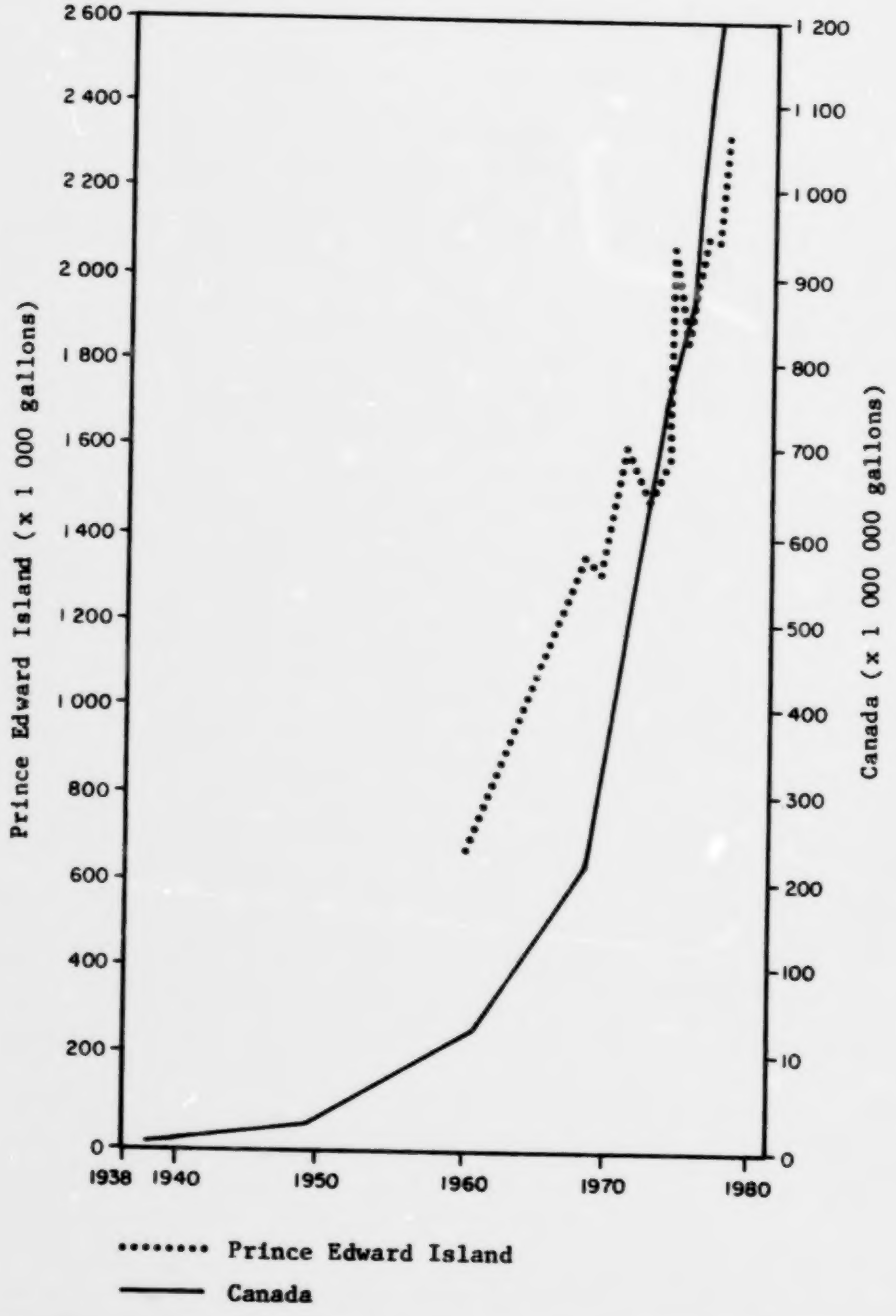
Truck Size	Number Registered	Percentage of Total (%)
0.25 ton - 0.50 ton	11 016	82
0.75 ton - 1 ton	1 776	13
1.5 ton - 3 tons	384	3
Straight Truck - Tandem Axles	137	1
Semi-trailers	77	0.57
Triaxle Units	51	0.38
TOTAL	13 441	100

It is evident from these statistics that the number of large trucks (i.e., greater than three tons) is quite low in comparison to the remainder of Canada. This is evidence that the trucking industry domiciled in Prince Edward Island is, in fact, quite small and that a significant proportion of trucking service to the province is provided by non-resident trucking operations.

It is considered that, for the above reason, the registration statistics may not be a good indicator of the overall growth in trucking in Prince Edward Island. A better indicator is considered to be the growth in diesel fuel sales. Statistics Canada data were reviewed (Publication 53-218). The results of this investigation are shown in Figure 2.3.2. The lines in this figure indicate that growth in diesel fuel consumption in Canada was very high in the late 1960's and early 1970's, and that this rapid growth slowed after 1972. The fuel consumption in Prince Edward Island did not grow as fast in the early 1970's but did in the middle and towards the end of that decade.

Figure 2.3.2

DIESEL FUEL USAGE FOR HIGHWAY TRANSPORTATION



These statistics were further analysed and the results are shown in Table 2.3.3. In this table, the relationship of the Prince Edward Island diesel fuel consumption to the Canadian consumption levels are illustrated for 1959, 1969 and 1979.

Table 2.3.3

DIESEL FUEL STATISTICAL COMPARISON

	1959	1969	% inc.	1979	% inc.
Prince Edward Island (thousand gallons)	683	1 321	93.4%	2 849	115%
Canada (billion gallons)	120	388	223%	1 137	193%
P.E.I. Share of National		5.69×10^{-3}		3.40×10^{-3}	2.51×10^{-3}

These figures indicate that while the national growth of diesel fuel sales was greater in the 1960's, the sales in Prince Edward Island grew more rapidly later in the seventies. It is also noteworthy that the growth in these sales in P.E.I. have been significantly lower than in the rest of Canada and that the proportion of diesel fuel sold in Prince Edward Island has continued to diminish.

These numbers tend to state that trucking in Prince Edward Island has been slow to develop and that this growth has not been as great as it has been in the remainder of the country.

2.4 Trucking and Prince Edward Island's Potato Industry

The production of potatoes is recognized as one of the principal activities in Prince Edward Island's economy. Over the past decade, approximately 50 000 acres of Prince Edward Island farmland has been devoted to the production of potatoes. The yield has varied between 10 and 12 million hundredweights, 0.5 to 0.6 million tons annually. The shipment of the potato crop a decade ago was accomplished almost entirely by rail cars, however, in the past few years, there has been a substantial shift of this shipment to trucking.

A.D.I. Limited of Fredericton, N.B., recently conducted a study of the transportation of Prince Edward Island potatoes for the Strategic Planning Group of Transport Canada. The results of the study were published in a report entitled "Prince Edward Island Potato Loading Point" published in October 1980. The findings of this study are used extensively in the following discussion to gain some insight into this important aspect of Prince Edward Island transportation. The results of the 1979 Origin-Destination Survey are also used and provide supplemental information on the trucking of this commodity.

Of the Island's potato crop, over half of the product is shipped off the Island for consumption elsewhere. The ultimate destination of the crop is shown in Table 2.4.1. Illustrated is a breakdown of Off-Island destinations of the crop for the 1977 and 1978 crops. It can be seen that the destination pattern is reasonably regular and that the Québec and Ontario markets tend to dominate the destinations. It is also of interest that the export market, particularly of seed potatoes, has become more significant in recent years.

Table 2.4.1

BREAKDOWN OF OFF-ISLAND DESTINATIONS FOR POTATO SHIPMENTS

	Percentage Shipped		
Destination	1977	1978	1979
Atlantic Provinces	21.0	18.9	18.0
Québec	21.6	23.7	17.9
Ontario	31.5	31.1	25.1
United States	6.7	5.6	5.6
Offshore via P.E.I. Ports	13.8	14.6	28.6
Offshore via N.B. Ports	5.4	6.1	4.7
Other Ports	0.0	0.0	0.1
TOTAL	100%	100%	100%

The utilization of different transportation modes for the shipment of potatoes to central Canada is shown in Table 2.4.2 for the 1977, 1978 and 1979 shipping seasons. This table shows that there has been a substantial shift from rail cars to trucks and piggyback services to the Québec and Ontario markets during the three years studied. In 1977-78, 75.9% of the potato crop moved to Québec and Ontario by rail car. This figure had been reduced to 48.0% by 1979-80. Trucking, on the other hand, had almost doubled its market share, rising from 20.5% to 38.6% during the same time period. The increasing significance of piggyback shipments is also noteworthy in this diagram.

In all cases, trucking is marginally more expensive than both piggyback service and rail. The future rising fuel prices would probably make these rate differences even more significant favouring the rail mode over trucking.

Of course, the level of service offered by trucks in the shipment of potatoes is higher than that offered by the rails. Delivery from P.E.I. to the central Canadian market will vary from three to eight days depending

Table 2.4.2

MODE UTILIZATION TO CENTRAL CANADIAN MARKETS

(% of Potatoes Shipped, by Weight)

Destination	Mode	Year 1977-78	 1978-79	 1979-80
Montréal	Rail Car	67.7	59.0	27.8
	Piggyback	4.3	13.6	26.0
	Truck	28.0	27.4	46.2
Other Québec	Rail Car	55.2	53.5	29.2
	Piggyback	-	4.4	1.5
	Truck	44.8	42.0	69.3
Total Québec	Rail Car	63.4	56.9	28.3
	Piggyback	2.8	10.1	17.3
	Truck	33.8	33.0	54.4
Toronto	Rail Car	85.3	72.5	62.4
	Piggyback	7.9	13.8	12.4
	Truck	6.8	13.7	25.2
Other Ontario	Rail Car	80.7	78.1	61.5
	Piggyback	-	3.9	7.0
	Truck	19.3	18.0	31.5
Total Ontario	Rail Car	83.6	74.9	62.1
	Piggyback	5.0	9.5	10.5
	Truck	11.4	15.6	27.4
Total Québec and Ontario	Rail Car	75.4	67.1	48.0
	Piggyback	4.1	9.8	13.4
	Truck	20.5	23.1	38.6

on distances and schedules when potatoes are shipped by rail. The same shipment by truck will typically vary between one and two days. A relatively unstable potato market favours flexibility. The marketplace generally favours the shipment of smaller loads in less time. The truck will normally ship in lots of 45 000 lbs. versus the 80 000 lbs. shipment of the railcar used for the rail shipment of P.E.I. potatoes. The unstable potato market then favours the utilization of trucks through both of these elements.

Another important advantage of trucking in the shipment of potatoes is the door-to-door service capability of the mode. This is reflected not only in the farm itself but in the location of the storage warehouses. The locational characteristics of these warehouses, with respect to transportation facilities, is shown in Table 2.4.3. It can be seen from these data that only 4% of the potato storage facilities are located on rail lines. Potatoes to be shipped by rail must first be moved to a rail siding for shipment, resulting in a double handling. The location of the destination of the potatoes with respect to rail lines and sidings is also important. It is logically assumed that some would have to be transported from the rail lines to distribution points. These handling requirements adversely affect both the economics and the level of service provided by rail transportation.

It is evident that the modal split has occurred in reaction to existing levels of service and economic conditions associated with potato shipments. It is uncertain at this time how this modal choice will be affected by future conditions. Certainly the rising fuel price will favour rail. A change in the location of storage facilities is another extremely important issue with respect to the transport alternative selected. It remains to be seen whether the rail network can offer the level of service advantages as well as economic ones that have been so important in the shift of potato transportation to the trucking mode.

To investigate the characteristics of the trucking industry associated with this potato movement, the 1979 Origin-Destination study proved to be quite useful. All trucks hauling the commodity coded "091" described as "vegetables fresh or chilled" in the Statistics Canada Standard Commodity Classification Manual were extracted from the SPSS computer file. These figures would include potato shipments as well as other vegetable movements to, from and on the Island. These figures were then expanded to reflect annual volumes using the expansion factors utilized by the overall survey. An initial inter/intra-movement analysis revealed the figures in Table 2.4.4.

The annual volume of vegetables shipped from P.E.I. is reasonably close to what we would expect, given the data presented earlier in the report on production figures, shipping proportions, and so on.

A further expansion of the data was used to investigate the classification of trucks hauling these vegetables.

Table 2.4.3

POTATO WAREHOUSE LOCATIONAL PATTERN

	Region			
Locational Characteristics	Prince County West of Summerside	Prince County Summerside and East	Queens and Kings County	P.E.I. Total
1. Number of Warehouses	86	159	212	457
2. % on All-weather Highway Only	27	30	25	27
3. % on Rail Line Only	0	2	6	4
4. % on All-weather Highway and Rail Line	13	2	3	4
5. % not on All-weather Highway or Rail Line	60	66	66	65

Table 2.4.4

INTRA/INTER-MOVEMENTS OF VEGETABLES

	Within P.E.I.	Interprovincial	
		From P.E.I.	To P.E.I.
Annual Vehicles	33 294	3 572	1 419
Annual Tons	220 000	87 000	12 000

Table 2.4.5 illustrates the number of public and private carriers hauling fresh and chilled vegetables in Prince Edward Island. These figures have been illustrated in a simplified origin-destination matrix form where the zones have been simply classified as being either within P.E.I. or external to the province. This then shows the intra/interprovincial traffic mix and the proportion of carrier classes involved in each segment of the vegetable shipment category.

Table 2.4.5

INTRA/INTERPROVINCIAL ANNUAL TRUCK MOVEMENTS OF COMMODITY 091 - VEGETABLES, FRESH AND CHILLED, BY CARRIER CLASSIFICATION

Origin	Destination			
	External		Internal	
External (Outside P.E.I.)	0	No Answer	690	No Answer
	297	Private	436	Private
	0	Public	292	Public
	0	Farm	0	Farm
	0	Other	0	Other
Internal (Within P.E.I.)	68	No Answer	2 544	No Answer
	2 235	Private	23 348	Private
	1 269	Public	3 937	Public
	0	Farm	2 982	Farm
	0	Other	484	Other

This table shows some interesting facts. Of particular interest is the relative proportion of private carriers involved in this interprovincial shipment. In the exporting of vegetables from the Island, which would be primarily potato shipments, the private carriers are hauling almost twice the number of truckloads as the public licensed carriers. This is also true for the vegetable shipments to Prince Edward Island. The internal shipments of vegetables logically show a high volume of truck movements largely by private truckers.

The vehicle population characteristics in the movement of vegetables was also investigated. The results of the analysis are shown in Table 2.4.6 which again shows the inter/intraprovincial truck movements, this time by truck type.

Table 2.4.6

INTRA/INTERPROVINCIAL ANNUAL TRUCK MOVEMENTS OF COMMODITY 091 - VEGETABLES, FRESH AND CHILLED, BY VEHICLE TYPE

Origin	Destination External		Destination Internal	
External	297	SU	847	SU
(Outside P.E.I.)	0	TST	572	TST
Internal	779	SU	26 809	SU
(Within P.E.I.)	2 793	TST	6 485	TST

Note: SU - Single unit truck
TST - Tractor Semi-trailer Unit

This illustrates that the single unit or straight truck is very much used for intraprovincial movements of this commodity, while the tractor semi-trailer unit is more commonly used for interprovincial movements.

Certain factors are evident in looking at the shipment of potatoes by truck. Again, evident is the lack of information and data that facilitates any detailed analysis of what is actually happening. It is evident from the work done that the utilization of trucking for the interprovincial shipment of Prince Edward Island potatoes is a relatively recent phenomenon which would in part explain a general lack of data. Trucking presently offers significant advantages for the shipping of potatoes, particularly, in the level of service offered. In the immediate future, therefore, there is likely to be an increase in the volume of this activity. The long term future of shipping potatoes by truck is uncertain and subject to a number of factors difficult to forecast.

REFERENCES

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Chapter 3

THE ECONOMIC STRUCTURE OF THE INDUSTRY

3.1 Introduction

A necessary step in the analysis of the impact of economic regulation on the trucking industry of Prince Edward Island is an in-depth examination of the economic structure of the industry. This chapter considers a number of aspects of the structure. This includes an examination of the cost structure of the industry and the consideration of an average firm in the industry. Questions of concentration and capital are also considered, as is the role of the broker in the industry. Data are available only on firms by province of domicile, which gives an incomplete picture of the industry at a provincial level.

The nature of the industry will be considered both in isolation from that operating in the remainder of Canada and also in comparison with the Canadian trucking industry. It is for this reason that the cost structure of the industry is considered in detail. Before drawing comparisons to the industry in other jurisdictions, the basis for the comparison must be identified. For that reason, effort is devoted to determining how the Prince Edward Island domiciled industry differs from that nationally, and attempts are made to explain those differences.

Most of the data employed in this chapter have been taken from two Statistics Canada publications. The financial and operating information has been drawn almost entirely from Motor Carriers: Freight and Household Goods Movers. This has been supplemented by information contained in the For-Hire Trucking Survey. In both cases, attention was focused on the years 1975 and 1978. Other information has been utilized. Information has been extracted from the Atlantic Provinces Transportation Directory, 1979, published by the Atlantic Provinces Transportation Commission. These data have been supplemented by information provided by officials of the province of Prince Edward Island relating to carrier and vehicle licensing. Where additional information has been utilized, sources are listed in the text.

3.2 Definition of the Industry

Statistics Canada defines the industry as consisting of those carriers with gross annual operating revenues greater than $100 000. These data incorporate a one-year lag period. In other words, the 1978 industry is defined as those carriers exceeding the income requirement in 1977. Those above the cut-off point are then divided into three classes. For 1978, Class III carriers had 1977 revenues at least equal to the lower bound, but less than half a million dollars. Class II carriers had revenues of at least this latter amount, but less than two million dollars. Class I carriers were those with 1977 revenues of two million dollars or more.

The 1978 Motor Carriers - Freight and Household Goods Movers reports that there were 20 motor carriers domiciled in Prince Edward Island in that year. Information from the Atlantic Provinces Transportation Directory - 1979 suggests that as of January 1, 1979, there were 20 carriers resident in Prince Edward Island who had a general freight license. In addition, there were 71 carriers holding a specific commodity license. This latter group includes contract carriers. There is duplication between the two lists, and no attempt has been made to remove this. Many of the carriers are small, and if an adjustment for both of these factors is made then the number of carriers in the sample appears reasonable, provided the analysis is in terms of licensed freight carriers. The question remains, however, as to whether carriers of exempt commodities are included in the sample.

As in the case of the New Brunswick study, there appear to be some shortcomings in the survey universe when Prince Edward Island is considered. It appears that much of this is accounted for in the case of Prince Edward Island by the number of small carriers licensed in that jurisdiction. As before, there is also the question of the inclusion or exclusion of the carriers of exempt commodities. It has not been possible to further define the nature of the exclusions. However, the problem must be kept in mind when evaluating the results of the analysis reported in this chapter.

3.3 Operating Revenues and Expenses

With these cautions in mind, a review of the operation of the motor carrier freight industry for the years 1975 and 1978 is presented. The objective of the exercise is to define the nature of that part of the industry which is included in the Statistics Canada survey, and to draw comparisons between the industry as it functions in Prince Edward Island and the rest of Canada. The chapter also provides financial and operational information which will be employed later in the report to assess the regulatory framework within which the Prince Edward Island domiciled industry operates.

Detailed information on costs and revenues for the year 1975 is shown in Table 3.3.1. In total, there were 15 firms domiciled in Prince Edward Island in that year, none of which was large enough to be included in the Class I category. In fact, only three of the firms were in Class II, with the balance - a full 80% of the total included in Class III. Class II firms in the table are those which had revenues of $0.50 million to $1.99 million in 1974. However, Prince Edward Island domiciled Class II carriers had an average revenue of only $412 000 in 1975 - well below the lower boundary. At the same time, Class III carriers had an average revenue of $301 000, within the acceptable range. It appears that at least one of the Class II carriers should have been placed in the lower group.

Turning to the cost side, the table shows that for Class II firms, transportation expenses amounted to 62.7% of total operating expenses in 1975. Salaries and fuel expenses accounted for 51.3% of transportation expenses. In that year, Class II carriers made no payments to brokers. Maintenance expenditures accounted for 20.7% of the total. Terminal expenses accounted for only 9.7% of total operating expenses. In the case

Table 3.3.1

MOTOR CARRIERS FREIGHT: OPERATING REVENUES AND EXPENSES BY CLASS - PRINCE EDWARD ISLAND - 1975

(thousand dollars or percent)

	Class II		Class III		All Classes	
Number of Firms	3		12		15	
Item	($)	(%)	($)	(%)	($)	(%)
Operating Revenue:						
Freight	1 222	-	2 651	-	3 874	-
Other	14	-	962	-	976	-
Total	1 237	-	3 613	-	4 850	-
Operating Expenses:						
Transportation						
Salaries	254	18.7	861	25.2	1 115	23.4
Fuel, incl. tax	234	17.2	456	13.4	689	14.4
Broker Payments	-	-	40	1.2	40	0.8
Total	851	62.7	1 955	57.3	2 773	58.1
Maintenance	281	20.7	496	14.5	776	16.3
Terminal	10	0.7	104	3.0	114	2.4
Traffic/Sales	2	0.1	-	-	-	-
Insurance/Claims	62	4.6	-	-	-	-
Admin./General	152	11.2	859	25.2	1 108	23.2
Total	1 357		3 413		4 771	
Operating Ratio	1.097		0.945		0.984	

Note: There were no Class I motor carrier operations in the province of Prince Edward Island in 1975.

Source: Statistics Canada, Motor Carriers - Freight and Household Goods Movers, 1975.

of Class III firms, transportation expenses formed a somewhat lower proportion of total operating expenses, amounting to only 57.3% of the total. Salaries were the single most important item, accounting for just over one quarter of the total. Only modest payments were made to brokers. Maintenance expenditures were a lower proportion of total costs in the case of Class III firms, and terminal expenses were higher.

Data for the industry domiciled in Canada are shown in Table 3.3.2 for 1975. Nationally, transportation expenses formed a larger proportion of total operating expenses than was the case in Prince Edward Island for Class II operations. The most notable difference here, one which most probably explains other differences, is the different role of the broker. In Prince Edward Island, there were no payments to brokers in the year used for analyses. For Canada as a whole, Class II carriers paid $82.3 million, or 14.8% of total operating expenses to brokers in that year. Related to this is the lower proportion of total operating costs accounted for nationally by fuel and maintenance expenses. Notwithstanding the greater role played by the brokers on a national scale, transportation salaries, as a proportion of total operating expenses, were one-third higher than in the Prince Edward Island sector of the industry. As expected, both terminal expenses and traffic and sales expenses were more important at the national level.

Similar differences exist between firms in Class III domiciled in the two jurisdictions, though the degree of difference here is not as great. As in the case of Class II, there are real differences in the role which is played by the broker. The broker accounts for just under 9% of total operating expenses on a national basis but only 1.2% for carriers domiciled in Prince Edward Island. Salaries are marginally more important nationally, and fuel costs marginally more important in the case of Prince Edward Island. Maintenance costs are higher in Prince Edward Island as are terminal expenses.

Data for Class I firms, and for the industry as a whole are also presented in Table 3.3.2. Neither are discussed in detail because the absence of Class I firms in Prince Edward Island make such discussion meaningless.

Data for the motor carrier industry domiciled in the province of Prince Edward Island for the year 1978 are set out in Table 3.3.3. As was the case in 1975, there are no Class I firms domiciled in that jurisdiction. Over the period, the number of firms included in the survey rose from 15 to 20, with all of the increase occurring in Class III.

On the revenue side for 1978, the average revenues by class are within the limits of the classes specified by Statistics Canada. Class II revenues averages $1.125 million, while Class III revenues averages $0.282 million. In 1975, Class II firms accounted for 25.5% of revenues earned by firms domiciled in Prince Edward Island, despite the fact that these comprise only 20% of the firms. In 1978, they accounted for 41.3% of the revenue, despite the fact that they accounted for only 15% of the firms in that year. The degree of concentration, prima facie at least, appears to have increased. This is a question to be addressed later.

Table 3.3.2

MOTOR CARRIERS FREIGHT: OPERATING REVENUES AND EXPENSES BY CLASS - CANADA - 1975

(millions of dollars or percent)

	Class I		Class II		Class III		All Classes	
Number of Firms	183		537		1 858		2 578	
Item	($)	(%)	($)	(%)	($)	(%)	($)	(%)
Operating Revenue:								
Freight	1 498.3	-	549.7	-	-	-	-	-
Other	33.7	-	24.8	-	-	-	-	-
Total	1 532.0	-	574.5	-	466.3	-	2 572.8	-
Operating Expenses:								
Transportation								
Salaries	317.9	21.7	132.8	24.0	117.9	26.7	568.6	23.1
Fuel, incl. tax	101.6	6.9	51.4	9.3	52.9	12.0	205.8	8.4
Broker Payments	159.3	10.9	82.3	14.8	39.1	8.9	280.7	11.4
Total	862.4	58.9	370.9	66.9	279.9	63.5	1 476.1	60.0
Maintenance	150.2	10.3	66.3	12.0	51.7	11.7	266.1	10.8
Terminal	185.3	12.5	18.5	3.3	8.9	2.0	205.8	8.4
Traffic/Sales	26.9	1.8	6.3	1.1	-	-	-	-
Insur./Claims	42.5	2.9	17.5	3.2	-	-	-	-
Admin./General	198.4	13.6	75.0	13.5	100.6	22.8	511.1	20.8
Total	1 463.8		554.4		441.0		2 459.2	
Operating Ratio	0.955		0.965		0.946		0.956	

Source: Statistics Canada, Motor Carriers - Freight and Household Goods Movers, 1975.

Table 3.3.3

MOTOR CARRIERS FREIGHT: OPERATING REVENUES AND EXPENSES BY CLASS - PRINCE EDWARD ISLAND - 1978

(thousand dollars or percent)

	Class II		Class III		All Classes	
Number of Firms	3		17		20	
Item	($)	(%)	($)	(%)	($)	(%)
Operating Revenue:						
Freight	2 956	-	4 325	-	7 282	-
Other	418	-	471	-	889	-
Total	3 374	-	4 796	-	8 170	-
Operating Expenses:						
Transportation						
Salaries	441	13.8	975	23.2	1 416	19.1
Fuel, incl. tax	423	13.2	699	16.6	1 122	15.2
Broker Payments	551	17.2	114	2.7	665	9.0
Total	2 223	69.4	2 454	58.4	4 631	62.6
Maintenance	424	13.2	643	15.3	1 067	14.4
Terminal	-	-	58	1.4	58	0.8
Traffic/Sales	23	0.7	-	-	-	-
Insur./Claims	149	4.7	-	-	-	-
Admin./General	383	12.0	1 045	24.9	1 646	22.2
Total	3 202		4 200		7 402	
Operating Ratio	0.949		0.876		0.906	

Note: There were no Class I carriers in P.E.I. in 1978.

Source: Statistics Canada, Motor Carriers - Freight and Household Goods Movers, 1978.

On the cost side, transportation expenses as a proportion of total operating expenses for Class II carriers rose sharply between the two years, reaching 69.4% in 1978. Within this group of expenses, the most notable change is the role played by the broker. While there were no payments to brokers in 1975, such payments accounted for 17.2% of total operating expenses in 1978. As a result of this changing role of the broker, the proportion of total operating expenses accounted for by both transportation related salaries and fuel costs declined sharply between the two years. As expected, the new role for the broker also reduced maintenance expenditures relative to total expenditures, though in all three of the cases noted, there was a significant actual increase between the two years. Terminal expenses disappeared between the two years, and the balance of the expense categories increased somewhat.

The importance of the broker also rose modestly between the two years in the case of Class III operations domiciled in Prince Edward Island. In 1975, this expense category accounted for 1.2% of total operating expenses, and 2.7% in 1978. Overall transportation expenses, as a proportion of total operating expenses, declined marginally between the two years. Maintenance costs decreased while administration and general expenses increased slightly.

Data for the industry domiciled in Canada in 1978 are set out in Table 3.3.4. Similar to the analysis for 1975, only Class II and Class III comparisons were made.

For Class II carriers in 1978, payments to brokers, as a proportion of total operating expenses for Prince Edward Island domiciled carriers, were greater than those for Canadian Class II carriers. Transportation expenses formed a somewhat greater proportion of total operating expenses in the case of Prince Edward Island. Transportation salaries were less important in a relative sense in the case of Prince Edward Island, while the situation for fuel costs was reversed.

For Class III carriers at the national level, transportation revenues accounted for 64.2% of total operating expenses in 1978, more than five percentage points higher than found for the Prince Edward Island sector of the industry. A large portion of this can probably be attributed to the different roles played by the broker in the two jurisdictions. Notwithstanding the fact that the broker was more important nationally, transportation salaries as a proportion of total operating costs were also higher. Maintenance costs were relatively more important in the Prince Edward Island case as were administration and general expenses, while terminal expenses were marginally more important at the national level.

In general, the Class II operations on Prince Edward Island changed significantly over the period under review. The greatest change was in the role played by the broker. From a "no role" position in 1975, the broker became relatively more important in Prince Edward Island than nationally by 1978. It is not possible to determine whether this was brought about by a change in the way in which the firms were operating, or through the entry into the industry, via purchase of carriers who were actively using brokers in other jurisdictions or a combination of both factors. There remained significant differences between the industry domiciled in Prince Edward Island and the industry as represented on a national level.

Table 3.3.4

MOTOR CARRIERS FREIGHT: OPERATING REVENUES AND EXPENSES BY CLASS - CANADA - 1978

(millions of dollars and percent)

	Class I		Class II		Class III		All Classes	
Number of Firms	272		657		2 660		3 589	
Item	($)	(%)	($)	(%)	($)	(%)	($)	(%)
Operating Revenues:								
Freight	2 538.0	-	725.0	-	-	-	-	-
Other	64.0	-	17.0	-	-	-	-	-
Total	2 602.0	-	742.0	-	677.0	-	4 021.0	-
Operating Expenses:								
Transportation								
Salaries	569.0	22.6	170.0	24.1	161.0	25.6	900.0	23.3
Fuel, incl. tax	167.0	6.6	69.0	9.8	78.0	12.4	314.0	8.1
Broker Payments	351.0	13.9	114.0	16.2	66.0	10.5	531.0	13.8
Total	1 516.0	60.2	473.0	67.0	404.0	64.2	2 393.0	62.1
Maintenance	283.0	11.2	88.0	12.5	82.0	13.0	453.0	11.8
Terminal	293.0	11.6	20.0	2.8	12.0	1.9	325.0	8.4
Traffic/Sales	48.0	1.9	8.0	0.1	-	-	-	-
Insur./Claims	74.0	2.9	23.0	3.2	-	-	-	-
Admin./General	306.0	12.1	95.0	13.5	131.0	20.8	685.0	17.8
Total	2 520.0		706.0		629.0		3 856.0	
Operating Ratio	0.968		0.951		0.929		0.959	

Source: Statistics Canada, Motor Carriers - Freight and Household Goods Movers, 1978.

For Class III carriers, however, there was not the same degree of structural change between the two years. While there was some shifting of the relative importance of various cost elements, essentially the structure of the class remained unchanged over the survey period. A similar statement could be made about the Class III component of the industry nationally, and therefore, the 1975 differences between the industry nationally and that provincially remained in 1978. As a result, there are significant differences between the two classes under provincial jurisdiction.

Section 3.4 of this chapter considers the industry from the point of view of the average firm.

3.4 Motor Carriers Freight: The Average Firm

Various averages were developed for the industry by class and in total for both 1975 and 1978. These data provide comparisons not only between the classes domiciled in Prince Edward Island, but also between the provincial jurisdiction and the trucking industry at the national level. The conditions prevailing in selected other provincial jurisdictions are also considered. Included in the latter group are: Québec (because the industry in that province is generally regarded as the most highly regulated in Canada); and Alberta (because it is widely regarded as the least regulated).

At this stage, it is necessary to offer several cautions and to explain what appears to be several omissions. With respect to the former, it is necessary to keep in mind the different role played by the broker in different jurisdictions, and in the case of Prince Edward Island domiciled carriers, the different role played by the broker over the survey period. The broker is most important in the case of New Brunswick, accounting for 39.9% of total operating expenses when all classes are considered together. Only in Newfoundland (27.9%), Saskatchewan (30.6%) and Alberta (30.7%) did the role of the broker approach even three-quarters of the New Brunswick figure in 1978. At the other extreme, the brokers played the least important role in the province of Québec, where they accounted for only 5.7% of total operating expenses in 1978. While it has not been possible to ascertain the exact consequences of this factor, its existence must be kept in mind when comparing ratios or averages for selected provinces. A second caution relates to the relatively small scale of the industry domiciled in Prince Edward Island, and to the fact that there are no Class I carriers domiciled in that jurisdiction. With respect to omissions, it is apparent that ton/mile figures have not been employed. While mileage figures by class are available by province of domicile, tonnage estimates are not. As a result, it has been impossible to compute such customary ratios as average revenue per ton mile. Furthermore, it is to be noted that regression analysis has not been performed on the available data. It was felt that the data available were not sufficiently homogeneous to permit an analysis, and interpretation of the results of such an analysis could be misleading. Consequently, only selected ratios have been computed. Data by class and in total for the industry domiciled in Prince Edward Island, and selected other provincial jurisdictions are shown in Table 3.4.1. The various averages provided present a picture of the operation of a typical firm by class across the nation. Immediately, it is obvious that there are no Class I firms domiciled in Prince Edward Island. As a result, care must be taken in interpreting the results of the "All Class" group with respect to that province.

In 1975, the average Class II firm domiciled in Prince Edward Island was considerably smaller than the Class II firms domiciled in other jurisdictions listed in Table 3.4.1. The Class II firms in Prince Edward Island had only 52% of the number of employees of the average Canadian Class II firm, 59% of the capital assets, and earned only 38% of the revenue. In addition, it paid on the average substantially lower wages and salaries. The average Prince Edward Island firm is below the lower bound of the class as established by Statistics Canada, presumably because at least one of the firms experienced a sharp drop in revenues in 1975 as compared with 1974 or 1978. The other jurisdictions shown are, on the average, well above the lower bound. The Prince Edward Island case for 1975 appears to be misleading and caution should be exercised when making intertemporal comparisons.

In 1975, the average Class III firm domiciled in Prince Edward Island was larger than that of any other jurisdiction shown when the measures of average employment and average revenues are employed. Only Class III firms domiciled in Québec equalled the Prince Edward Island firms when the measure of average assets was used. When average mileage is used, the Prince Edward Island firm is the smallest of any of the jurisdictions shown, reflecting the fact that geographically the jurisdiction is smallest, and that the tendency exists for the smaller firms to be intraprovincial in scope. Finally, with respect to average employee compensation, it is clear from the table that the average Prince Edward Island firm is well below the Canadian average. Moving westward from Prince Edward Island, the average compensation rises, being highest in Alberta.

Overall, it appears that the typical Class III firm domiciled in Prince Edward Island in 1975 was closer to the upper bound of the class than was the case elsewhere among those jurisdictions considered. Considering both classes, it appears that the average Prince Edward Island firm was closer to the dividing line between Class III and Class II than was true elsewhere in the country.

Before considering the 1978 data it should be noted that in the mileage comparisons made, 1976 rather than 1975 data were used. The 1975 mileage data were rejected because of the fact that they did not, when combined with fuel data, give consistent fuel efficiency figures. For example, the 1975 fuel and mileage figures yielded an efficiency of 3.462 miles per gallon in Nova Scotia and 18.429 miles per gallon for New Brunswick. The 1976 figures did give consistent results and were selected for use in the analysis.

Data for the average firm by class and in total for the same jurisdictions for 1978 are shown in Table 3.4.2. There are no Class I firms in operation in Prince Edward Island, and the Class I data are presented for comparison in other jurisdictions. Only the Class II and Class III data will be discussed.

Table 3.4.1

MOTOR CARRIERS FREIGHT: VARIOUS AVERAGES IN CANADA AND SELECTED PROVINCES - 1975 (1)

Class	Average Number Employees	Average Employee Compensation ($)	Average Revenue ($ million)	Average Assets ($ million)	Average miles per firm (millions)
Class I					
P.E.I.	-	-	-	-	-
N.B.	155.5	9 410	8.12	4.42	2.54
Québec	243.4	11 719	6.62	5.09	4.48
Ontario	308.6	12 965	9.56	6.18	5.54
Alberta	171.0	12 425	7.59	4.54	3.87
Canada	260.6	12 638	8.37	5.41	4.71
Class II					
P.E.I.	16.7	8 440	0.41	0.35	(2)
N.B.	37.3	9 520	1.22	0.66	1.22
Québec	40.1	11 000	1.13	0.65	0.94
Ontario	31.1	11 886	1.07	0.63	1.02
Alberta	23.3	12 657	1.04	0.51	0.81
Canada	31.9	11 540	1.07	0.59	0.91
Class III					
P.E.I.	12.5	8 400	0.30	0.18	-
N.B.	7.0	8 821	0.21	0.13	0.23
Québec	10.1	9 060	0.26	0.18	0.27
Ontario	9.0	9 788	0.26	0.16	0.25
Alberta	7.8	10 106	0.26	0.17	0.28
Canada	8.9	9 602	0.25	0.17	0.26
All Classes					
P.E.I.	13.3	8 410	0.32	0.21	0.23
N.B.	22.6	9 327	0.89	0.49	0.58
Québec	31.1	10 893	0.84	0.58	0.73
Ontario	45.7	12 377	1.42	0.90	1.05
Alberta	21.0	11 866	0.87	0.50	0.63
Canada					

Notes: (1) 1976 is used instead of 1975. See Text.

(2) Included in Newfoundland.

Source: Calculated from data presented in: Motor Carriers - Freight and Household Goods Movers, Statistics Canada, 1975.

Table 3.4.2

MOTOR CARRIERS FREIGHT: VARIOUS AVERAGES
IN CANADA AND SELECTED PROVINCES - 1978

Class	Average Number Employees	Average Employee Compensation ($)	Average Revenue ($ million)	Average Revenue ($ million)	Average miles per firm (millions)
Class I					
P.E.I.	-	-	-	-	-
N.B.	152.3	13 134	9.62	3.86	1.82
Québec	265.5	16 168	9.47	5.55	4.11
Ontario	255.7	16 780	10.68	6.29	4.66
Alberta	129.1	17 594	8.11	4.76	2.93
Canada	219.8	16 831	9.56	5.46	3.90
Class II					
P.E.I.	22.7	11 265	1.12	0.57	0.77
N.B.	28.7	12 891	1.41	0.67	0.86
Québec	29.8	14 538	1.16	0.76	-
Ontario	25.9	14 730	1.09	0.66	-
Alberta	22.3	16 201	1.22	0.49	-
Canada	25.5	14 917	1.13	0.65	0.69
Class III					
P.E.I.	8.1	9 562	0.28	0.18	0.22
N.B.	6.0	10 746	0.24	0.11	0.23
Québec	7.4	11 745	0.26	0.16	0.20
Ontario	7.1	11 362	0.26	0.14	0.20
Alberta	6.1	12 337	0.26	0.16	0.18
Canada	6.7	11 868	0.25	0.14	0.19
All Classes					
P.E.I.	10.3	10 122	0.41	0.24	0.30
N.B.	19.5	12 504	1.06	0.45	0.43
Québec	29.4	15 039	1.07	0.65	0.57
Ontario	37.5	15 783	1.54	0.90	0.78
Alberta	17.3	16 041	0.96	0.52	0.46
Canada	26.3	15 553	1.12	0.64	0.56

Source: Calculated from data presented in: Motor Carriers - Freight and Household Goods Movers, Statistics Canada, 1978.

The data in Table 3.4.2 for 1978 shows that the average revenues in all jurisdictions are consistent with the Statistics Canada definition of Classes. In the case of Class II firms, the Prince Edward Island average is above that for Ontario, and only fractionally below the national average. It is, however, well below that in New Brunswick, Alberta and Québec. In this case, at least the degree of regulation does not appear to influence average revenue. From the point of view of employment per firm, the average Prince Edward Island firm exhibits a value below the national average, but above the Alberta average. New Brunswick, Québec and Ontario all exceed the national average. Using the average assets as a measure, the ranking are the same, except that the positions of Québec and New Brunswick are reversed. Here, it is interesting to note that Québec, a highly regulated jurisdiction, had the highest value for average assets. Alberta, with a lower level of regulations, had the lowest value. This is the result that the theory of regulation would predict. Finally, with respect to Class II group, average mileage for the Prince Edward Island segment of the industry ranked second only to New Brunswick among jurisdictions used for comparison. Both, as well as Québec and Ontario, had values above the national average.

Ideally, it would be useful to draw comparisons of the situation in the province of Prince Edward Island between the two survey years. Unfortunately, little can be said in this regard because of the data problems of this class in 1975 already noted.

An analysis of the Class III operations indicates, as was the case in 1975, that the average Prince Edward Island firm is larger than others in the jurisdictions included whether the measure employed is the average number of employees, average assets, or average revenue. In 1978, unlike the case of the 1976 mileage discussed earlier, Prince Edward Island now ranks second, behind New Brunswick, among those jurisdictions included. From the point of view of average employee compensation, the average firm in Prince Edward Island still has the lowest wage/salary. It should perhaps be noted for the sake of clarification that the amounts used here are in nominal terms. No attempt has been made to adjust the figures for inflation. Were that to be done, it would become apparent that while the relative rankings would be unchanged, the real average assets employed by the average firm in all cases were reduced between 1975 and 1978 and that real average revenue decreased as well.

Ideally, the approach should be to construct and estimate the parameters of several equations for use in explaining the cost behaviour of the firms involved. Such an exercise would be largely futile, because of the difficulties involved in interpreting the results in view of the obvious differences among the sub-groups involved. One would require significantly more reliable information concerning the entire question of the broker operation, traffic volumes, and the nature of shipping patterns (especially truckload versus less-than-truckload) before this was possible. At the present time, such data are not available.

3.5 Concentration in the Industry

In the usual measures of concentration, it is customary to present data on the proportion of total output accounted for by a given number of firms in an industry. Thus, it is usual to find ratios of concentration for, as an example, four or eight firms in an industry. Such an approach is not possible here. As an alternative, it has been decided to present proxy indicators of concentration. At the national level, the yardsticks are the proportion of total operating revenues in the industry accounted for by both the top 100 firms and by all firms in Class I. For the province of Prince Edward Island, the ratio employed is that of the operating revenues of the Class II carriers (of which there are three in the years for which data are available) to the total operating revenues of all firms in Class II and Class III (there were no Class I carriers domiciled in that province). These data appear in Table 3.4.3 below.

Table 3.4.3

SHARES OF TOTAL OPERATING REVENUES ACCOUNTED FOR BY VARIOUS SUB-GROUPS - CANADA AND PRINCE EDWARD ISLAND - 1975 TO 1978
(percentages)

Subgroup	1975	1976	1977	1978
P.E.I., Class II	25.5	(1)	35.2	41.3
Canada, Top 100	53.0	53.0	51.0	50.0
Canada, Class I	62.0	64.0	65.0	67.0

Source: Calculated from Motor Carriers: Freight .

(1) Class II data for P.E.I. not available separately in 1976.

In 1975, 1977, and 1978, there were three firms included in Class II in the Prince Edward Island motor carrier (freight) industry. It was not possible to obtain data concerning the largest four carriers, so this group has been used instead. It should be noted that this does not result in a customary measure of concentration, but has to be regarded as the best available. There were, as has already been noted, no Class I carriers in this jurisdiction during the period under review, and as a result, the three Class II carriers were the largest in the industry.

The data in Table 3.4.3 suggest that the degree of concentration among Prince Edward Island domiciled carriers is low, below that nationally, or that faced in New Brunswick. In 1975, the Class accounted for 20% of the domiciled firms, and 25.5% of the total operating revenues. In 1978, the Class accounted for 15% of the firms, and 41.3% of total operating revenues. On the basis of these data, it can be concluded that the degree of concentration remained low over the period, though it did show a slight upward trend.

3.6 The Role of the Broker

It has already been shown that in 1975 the broker played a limited role in the motor carrier freight industry domiciled in the province of Prince Edward Island. According to Statistics Canada data, in 1975, the Class II carriers made no payments to brokers, while these payments accounted for only 1.2% of total operating expenses. Nationally, in the aggregate, the broker payments accounted for 11.4% of total operating expenses. By 1978, Class II payments to brokers in the Prince Edward Island industry accounted for 17.2% of total operating expenses, slightly higher than the 16.2% found at the national level. Equivalent Class III figures were 2.7% and 10.5%, respectively. Aggregate figures are not presented since they would be misleading in the absence of Class I carriers in the provincial case.

The data suggest that in 1978, the role of the broker in the Class II part of the industry was essentially similar in both cases. However, the growth in the role at the provincial level suggests that there was substantial change in the structure of the industry at that level in the period under review, a change which should be monitored in the future. In the case of the Class II component of the industry, the role of the broker in Prince Edward Island remains much smaller than the role nationally.

There is a lack of homogeneity in the role of the broker both within the industry in the provincial jurisdiction, and between that level and the national average. This would seem to suggest that there is the necessity of an in-depth examination of the role of the broker in the different jurisdictions across the country. Such a study is beyond the present terms of reference.

3.7 Ownership Structure

The final question to be addressed in this section of the report is that related to the ownership structure of the industry as domiciled in the province of Prince Edward Island. In the case of Class II in 1978, all three firms in Prince Edward Island were incorporated. Nationally, 647 of 657 firms were organized in this form. Incorporation was also the most usual structure in Class III operations. This form accounted for 14 of the 17 firms in the provincial case in 1978 and 1 757 of the 2 660 cases nationally. In the case of Prince Edward Island, there were two sole proprietorships and one partnership. Equivalent national figures were 721 and 173, respectively. These forms accounted for all of the firms at the provincial level. Nationally, in addition to these there were four co-operative type firms, and five other types of organization. The operating structures in both jurisdictions are then, essentially the same.

3.8 Summary and Conclusions

This chapter of the report has examined the structure of the Motor Carrier Freight Industry domiciled in the province of Prince Edward Island to provide background for the examination of trucking regulation.

The investigation determined that there were difficulties with the definition of various classes of carrier as employed by Statistics Canada. The movement of carriers among classes between years makes longitudinal comparisons difficult given the small sample size for this jurisdiction. In addition, there appears to be serious problems with the extent of coverage of the industry, and it is recommended that steps be taken to rectify this problem.

Perhaps the most obvious difference between the industry domiciled in the province of Prince Edward Island and that nationally is the absence of Class I carriers in the former jurisdiction. In 1975, approximately the same proportion of carriers fell into Class II in both jurisdictions, with the province having a somewhat larger proportion of Class III carriers. In 1978, there were proportionately fewer carriers in Class II provincially, with a consequently greater percentage falling into Class III.

In 1975, there were differences in the structure of the industry as domiciled in the two jurisdictions. In the case of Class II carriers, perhaps the most notable of these was the differing role of the broker. The broker played no role in the provincial case, but accounted for almost 15% of total operating expenses nationally. This brought about other differences, for example, the lower proportion of fuel and maintenance expenses nationally. There were similar differences in the case of Class III carriers, though the differences were not as great.

By 1978, changes had occurred in the structure of the trucking industry in Prince Edward Island. The most significant of these was in the role of the broker in Class II operations. In that year, payments to brokers were slightly higher provincially than nationally. Overall transportation expenses were somewhat higher provincially, as were fuel costs. Salaries, however, formed a somewhat lower proportion of the total. Turning to Class III, it was found that transportation expenses formed a larger proportion of total expenses nationally, and it appears that this difference is explained chiefly by the different role of the broker. Overall, one can conclude that there was greater structural change in the case of Class II firms domiciled in Prince Edward Island than was the case in Class III.

Turning to the question of the average firm, it was found that in 1975, the average Class II firm in Prince Edward Island was considerably smaller than its national counterpart no matter which of the measures is employed. In the case of Class III firms, the provincial firm was larger than its national equivalent when the measures used were average employment, revenue and assets. It paid a lower average salary, and had a substantially lower average mileage, reflecting perhaps, geography as much as anything. As explained earlier, the mileage in question here is for 1976.

For Class II firms in 1978, the Prince Edward Island firm had average revenues fractionally below that nationally, and average assets were below the national average as well as was employment. In terms of average mileage, however, the typical Prince Edward Island firm was larger than its national counterpart. Using average employment, assets and revenues for 1978, it was found that the average Prince Edward Island firm in Class III is larger than at the national level. Mileage is higher at the provincial level as well. In both Class II and Class III, however, average employee compensation is substantially below the national average.

Turning to the degree of concentration, it appears that the degree of concentration in the Prince Edward Island domiciled industry is lower than found nationally. It should be noted that the measure employed is not entirely satisfactory. Furthermore, the degree of concentration increased sharply in the period 1975 to 1978 but the sample size is small.

The broker played only a modest role in the Prince Edward Island domiciled industry in 1975. In the case of Class II firms, the role of the broker increased substantially in the period to 1978 so that in that year, it was more important at the provincial level than at the national level. The role of the broker, both in this jurisdiction and elsewhere is not entirely clear due to the absence of data. It should be the subject of a separate in-depth study. Such a study is beyond the scope of the present investigation.

As is the case nationally, the most common form of ownership in the trucking industry in the province of Prince Edward Island is the corporate form. There are no real differences between the situations in the two jurisdictions.

Chapter 4

REGULATION OF TRUCKING IN PRINCE EDWARD ISLAND - A DESCRIPTION

4.1 Introduction

The trucking industry in Prince Edward Island as in other jurisdictions can be regulated in two ways. First, legislation enables the regulation of motor vehicle and other haulage units relative to the operation of the units. The second area of regulation is in the economic realm dealing with such factors as entry control and rate making. This section of the report deals with the first aspect of regulation of trucks in Prince Edward Island through the Highway Traffic Act and the Roads Act.

The Prince Edward Island Highway Traffic Act (1974) is the responsibility of the Provincial Secretary. In this act, there are many rules and regulations associated with the safe and expeditious operation of vehicles on the provincial highway network. The rules of the road, licensing and registration requirements of vehicles are outlined in detail. This act is of obvious concern to the trucking industry as it directly affects the operating environment of the drivers and their vehicles.

4.2 Licensing of Vehicles

In the Highway Traffic Act, the Registrar of motor vehicles is established as being responsible for the licensing of all motor vehicles being used on the province's highway system. Trucks are generally classified as commercial motor vehicles or commercial vehicles which are defined under the Act as vehicles that are designed or adapted for the carrying of freight, wares, or merchandise. It, therefore, includes trucks of all sizes and excludes only passenger cars and farm tractors.

Trucks and truck tractors must be registered, the fees for which are based on the gross weight of the vehicle. Selected annual registration fees for different size vehicles are listed in Table 4.2.1. This includes straight trucks and tractor semi-trailer units registered as one vehicle. A commercial trailer or semi-trailer can be registered separately. These registration fees are again proportionate to the gross weight and can vary up to a maximum of $60.00 per annum.

A commercial vehicle with a gross vehicle weight in excess of 8 000 lbs. can be registered for one third of the year. This allows truckers to spread the registration fee over three time periods rather than paying it in a single annual payment. It also allows some flexibility for seasonal trucking.

Table 4.2.1

ANNUAL REGISTRATION FEES FOR COMMERCIAL VEHICLES

Gross Vehicle Weight up to (lbs.)	Annual Fee ($)
3 000	14.00
10 000	67.00
25 000	277.00
50 000	577.00
100 000	1 157.00
110 500	1 267.00

4.3 Truck Weights in Prince Edward Island

While the general rules of the road are established in the Highway Traffic Act, the general framework of establishing weight regulations within Prince Edward Island is within the regulations under the Roads Act (1965). Under the Act, the Minister of Highways is given the jurisdiction to pass regulations with respect to the weight of vehicles using the province's highway system.

The province of Prince Edward Island, through these regulations in 1970, increased the maximum axle weights allowed on the province's highway system. These regulations allowed a front axle to carry 10 000 lbs. while a rear axle (single) could carry up to 20 000 lbs. A Tandem axle could carry up to 35 000 lbs. This allowed weights of up to 45 000 lbs. for a straight truck with tandem rear axles and 80 000 lbs. for a tractor semi-trailer with tandem rear axles on to the tractor and the semi-trailer. While these changes allowed a significant increase in the size of vehicles on Prince Edward Island highways, it remained as a rather simple application of single and tandem axle weight summation.

A later amendment to the Roads Act passed in 1975, further rationalized the process of establishing truck size and weight maximum. The new regulations were based on allowable weights as a function of not only axle configuration but also axle spacing and the point loading of tires on the pavement. The new regulations did not change the allowable weights of configurations up to the 80 000 lbs. tractor semi-trailer combination. However, the addition of the spacing requirements of the axles rationalized these allowable loads.

An important feature of the 1975 regulations was the recognition of the tri-axle trailer into the fleets. Due to similar changes in the weight regulations in New Brunswick in 1970, the tri-axle trailer became a very popular large truck configuration. The 1975 changes in Prince Edward Island regulations made it possible for interprovincial trucking with this larger vehicle type.

For the tractor and tri-axle semi-trailer unit, the maximum allowable load on the front (steering) axle was increased to a possible 13 000 lbs. from 10 000 lbs., providing a front tire size with 11.00 inches of contact width was utilized. The utilization of these tires and a suitable configuration allowed a truck with a gross vehicle weight of 110 500 lbs. in the highway system for the first time.

As with New Brunswick, these new permissible weights are based on the "Ontario Bridge Formula" and the operation of tri-axles is restricted to routes having heavier bridge and pavement design standards. The routes on which a truck with a gross weight in excess of 80 000 lbs. are specified in the 1975 amended regulations to the Roads Act. These are listed in Table 4.3.1.

Table 4.3.1

ROUTES ON WHICH TRUCKS WITH A GVW IN EXCESS OF 80 000 LBS. ARE ALLOWED ON PRINCE EDWARD ISLAND

13.1	Route 1-Borden to Charlottetown to Wood Islands
13.2	Route 1A-Borden to Summerside,
13.3	Route 3-Cherry Valley to Georgetown
13.4	Route 4-from Route 3 to Montague
13.5	Route 2-Charlottetown to Souris
13.6	Route 2-Charlottetown to Kensington and Tignish
13.7	Route 151-Elmsdale to Alberton
13.8	Route 107-Read's Corner to Traveller's Rest
13.9	Route 142-from Route 2 to O'Leary
13.10	Route 121-from Sherbrooke to Summerside, via Granville Street

Weight regulations and tables are illustrated in Appendix A.

It should be noted that Prince Edward Island does not allow all configurations on its highway system and has been reluctant to allow double semi-units and the trailer trains.

The current utilization of heavier vehicles on Prince Edward Island highways was examined in the 1979 origin-destination statistics. Table 4.3.2 illustrates the number and proportion of truck configurations at the survey station locations on the Island. Three classifications of vehicles which were used for the 1979 study are as follows:

1. Single Unit Truck;

2. Single Unit Truck with Trailer; and

3. Tractor Semi-Trailer Unit.

Table 4.3.2

NUMBER AND PERCENTAGE OF TRUCK TYPES INTERVIEWED AT EACH STATION

	Single Unit Truck	Single Unit With Trailer	Tractor Semi-Trailer Unit
Woodstock	167 - 65%	28 - 11%	61 - 24%
Miscouche	176 - 72%	21 - 8%	46 - 19%
Bedeque	172 - 58%	33 - 11%	
Borden	52 - 31%	18 - 11%	93 - 57%
Pleasant Valley	158 - 66%	24 - 10%	56 - 23%
Stanley Bridge	39 - 78%	9 - 18%	2 - 4%
Cymbria	61 - 86%	3 - 4%	7 - 8%
New Haven	154 - 58%	19 - 7%	92 - 34%
Melton	190 - 70%	26 - 9%	54 - 20%
Marshfield	180 - 83%	9 - 4%	27 - 13%
Hazelbrook	182 - 69%	11 - 4%	72 - 27%
Wood Island	59 - 73%	6 - 7%	16 - 20%
Brudenell	152 - 78%	11 - 6%	30 - 16%
Souris	199 - 84%	8 - 3%	31 - 13%
Elmsdale	65 - 78%	8 - 10%	10 - 12%
New Annan	106 - 74%	13 - 9%	25 - 17%
Brockvale	12 - 75%	0 - 0%	4 - 25%

Table 4.3.3

CROSS-TABULATION OF TRUCK TYPES
BY THE NUMBER OF AXLES ON THE VEHICLE

Vehicle Type	2	3	4	5	6
Single Unit Truck	1 538/72.4%	578/27.2%	86/.4%	-	-
Single Unit with Trailer	-	88/35.6%	40/16.2%	110/44%	9/4.0%
Tractor Trailer Units	-	38/5.0%	43/7.0%	610/80%	52/6.9%

A single unit truck with a trailer is not a common vehicle type and would refer to a common single unit truck with a trailer attached. This is utilized on the island for transporting potatoes. It is evident from these numbers that the single unit truck is the mainstay of the trucking industry in Prince Edward Island. The Borden Station numbers tend to indicate that the tractor trailer dominates interprovincial truck movement.

For a further insight into the configuration of the truck units, a cross-tabulation of the vehicle types by the number of axles was also conducted. The results of this tabulation are shown in Table 4.3.3 for the three vehicle types under study.

This table illustrates the configuration for all trucks of sizes greater than a pickup truck or van. Of the single unit truck, the simple 2-axle truck dominates the scene. The tractor trailer units are heavily dominated by the 5-axle tractor trailer configuration. The tri-axle or the 6-axle tractor semi-trailer unit has grown to become a rather significant component of the truck population.

4.4 Spring Weight Restrictions

With the allowance of heavier wheel and axle loadings on the province's highway system, the Prince Edward Island Department of Highways has been carefully monitoring the strength of the highway system. This concern is especially important during the spring when the annual thaw weakens the road pavement structure. The need for spring weight restrictions has thus been recognized and used to control the loads on roadways during this critical period.

The Prince Edward Island Department of Highways monitors the strength of highways by utilizing the Benkleman Beam.

The routes specified in Table 4.3.1 are considered to be Prince Edward Island's all weather highway system and trucks are allowed to operate year round at the gross vehicle weight. On the remainder of the highways, axle loads are restricted to 10 000 lbs. for the front axle and 12 000 lbs.

for all other individual axles. In addition to the period of full restrictions, selected periods where the restrictions have been eased by 30% and 50% have been used in the past. The restriction periods for the past eight years are shown in Figure 4.4.1.

It is noteworthy that in these restriction periods, if the temperature drops to $-6^{\circ}C$, vehicles are permitted to carry up to the gross vehicle weight between 5 a.m. and 10 a.m. on the same day.

The spring weight restrictions are especially important to the shipment of potatoes on the island. As pointed out in Chapter 2 of this report, the vast majority of potato shipment facilities are located on local roads that are subject to spring weight restrictions. The season of road closure coincides with the peak month for shipping potatoes off the island when the seed potatoes are shipped out. This factor has probably been an important determinant in the modal choice decision dealt with in Chapter 2 of this report.

Spring weight restrictions apply to all vehicles on the highway except school buses and there are no commodities that are exempt. Special permits are granted by the Department of Transportation if it is considered that the restriction will cause undue hardship to a particular user.

Enforcement of the spring weight restrictions is accomplished through the inspectors from the Department of Highways. During the spring period, traffic weights are monitored through portable truck scales set-up for spot checks on highways. A vehicle found to be overweight is guilty of an offence and the owner is subsequently fined. Also, the vehicle is stopped until a suitable portion of the load is removed to bring the vehicle within weight tolerances.

4.5 Safety

The general operating framework of the Prince Edward Island Highway Transportation System is contained within the Highway Traffic Act. In this Act, rules and regulations covering the rules of the road, traffic ordinances, and highway safety are established. Specific parts of the Act are unique to trucks. Such elements are: dimensions and weights; details of loading; and the load security are dealt with in some detail. A number of noteworthy points will be briefly made as significant to the trucking industry.

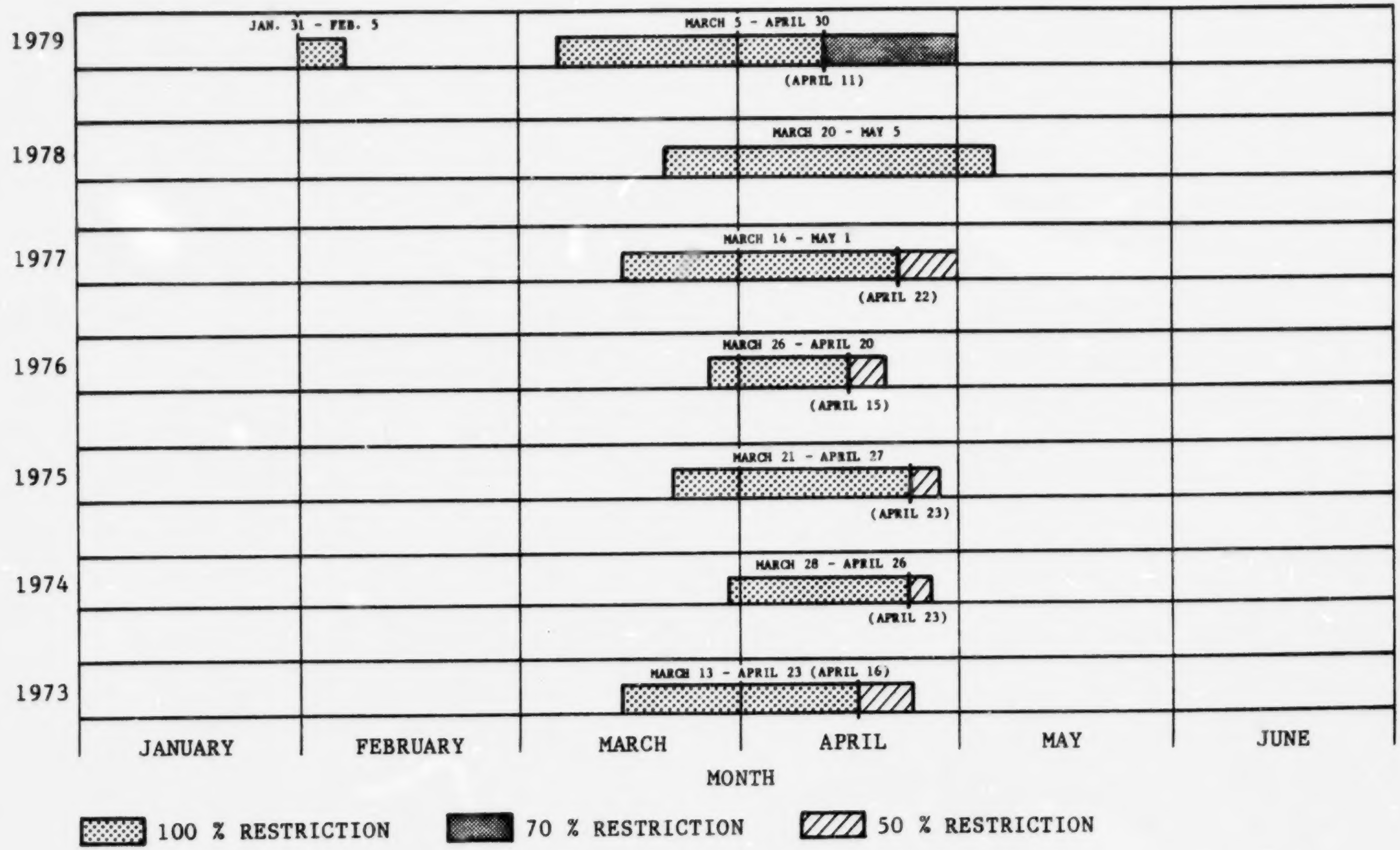
An important point is that trucks are required to undergo an annual motor vehicle inspection. On Prince Edward Island, all vehicles with the exception of farm trucks are required to undergo an annual inspection.

Speed limits on the provincial highway system vary depending upon traffic and the conditions of the driving environment. The major arterial highways with some degree of access control are posted at 90 km per hour. This speed limit is generally reserved for highways with good geometry, both in alignment and cross section, and with adequate access control.

The remainder of the highways are posted at 80 km per hour except where localized conditions may require the reduction of this limit to as low as 50 km per hour. The collector highways system generally operates at 80

Figure 4.4.1

PERIODS OF WEIGHT RESTRICTIONS FOR THE PROVINCE OF PRINCE EDWARD ISLAND



NOTE: | INDICATES DATE RESTRICTIONS WERE EASED.

km per hour where conditions permit. The local roads generally operate at a lower speed and where not posted - the speed limit is considered to be 80 km per hour.

The province of Prince Edward Island has been working with the Government of Canada in its development of policy and regulations with respect to the transportation of dangerous commodities. As a result of this work, an Act reflecting this work was passed in the Prince Edward Island legislature in April of 1981. This Act has not yet been proclaimed; however, proclamation is expected to be forthcoming very soon and a comprehensive set of laws with respect to the movement of dangerous commodities in Prince Edward Island will be thus enacted.

Chapter 5

ECONOMIC REGULATION OF THE TRUCKING INDUSTRY

The economic regulation of trucking is usually justified on the grounds of protection of the interests of some particular group. In some instances, it is argued that the consumer or user of transportation services should be protected, and in these instances, regulation usually takes the form of the control of rate increases. In other cases, it is argued that firms require protection from each other. Here, typically, the protection tends to come in the form of minimum rate control which is designed to prevent ruinous or destructive competition. That there is some conflict between these two objectives is obvious. At other times, it is argued that the public service conditions imposed upon carriers require internal cross-subsidization, and that therefore, the denser, usually more profitable, routes possessed by carriers should be protected from the inroads of additional competition to ensure adequate earnings to permit this cross-subsidization to occur. Finally, it is sometimes suggested that the function of entry control is to permit the orderly development of the industry, to permit some sort of rough balancing of capacity and demand, for substantial excess capacity is viewed as having undesirable side effects.

It is with this general background in mind that the regulation of trucking in Prince Edward Island is considered. One question to be addressed is the extent to which these processes attain the objectives of regulation set out above. As is the case in most jurisdictions, the regulation of trucking in Prince Edward Island takes place under authority of both federal and provincial statutes. Under the terms of the Motor Vehicle Transport Act, an outgrowth of the Winner case, the Prince Edward Island Motor Carrier Board has been delegated authority over extraprovincial for-hire motor transport undertakings by Parliament. It derives its authority over intraprovincial for-hire motor transport from the provincial Motor Carrier Act .

The chapter begins with a review of the Motor Carrier Act and related Regulations. The objective here is to determine the framework within which trucking regulation is supposed to operate. Having this completed, attention will be turned to the question of regulation in practice to determine how well the actions of the regulatory body conform to the theory of regulation. Also of interest is the question of the extent to which regulation in the province of Prince Edward Island achieves the usual justifications for regulation.

5.1 Legislative Provisions: The Motor Carrier Act and Regulations

The relevant legislative provisions are contained in the Motor Carrier Act of the province of Prince Edward Island, its amendments, and the various regulations issued under the statute. As has already been noted, provisions of the Motor Vehicle Transport Act (Canada) are relevant as well.

Motor carrier regulation in Prince Edward Island is carried out by the Public Utilities Commission. Under the Act, those wishing to enter the industry must apply in writing to the Commission providing the information in the form prescribed by the Commission. Upon receipt of the application, the Commission fixes a hearing date and gives public notice of the same. All applications involve hearings. Objections to the application are permitted provided that the applicant and the Commission are both informed ten days before the hearing in writing as to the reasons for the objection. The Commission may, at its discretion, impose costs upon an objector if it finds the objection to be unwarranted. Any individual who, in the opinion of the Commission, has an interest in the application may appear. In determining whether to grant a license, the Act requires the Commission to:

> give consideration to the transportation service being furnished by any railroad or licensed motor carrier, the likelihood of such service being permanent and continuous throughout the periods of the year that the highways are open to travel and the effect that the proposed service may have upon other transportation services. (Section 3(7))

The Commission has the power to grant the application in whole or in part. Such license, however, may not be issued until proof of proper insurance coverage is provided by the applicant.

Under Section 5, licenses can be sold, leased, assigned, or transferred only after Commission approval. Such approval, which can be given only after a public hearing, is also necessary in the cases of consolidation or merger. Licenses must be exercised within 30 days, or they are deemed cancelled. Section 9 provides that discontinuance of motor bus service cannot occur without Commission approval. By implication, there is therefore no exit control over motor trucks. Section 10 of the Act provides that public motor buses or public motor trucks shall not be operated in Prince Edward Island without a license from the Commission unless specifically exempted.

Section 11 of the Act deals with exempt commodities. The following are exempted from the provisions of the Act:

(a) any vehicle while being used exclusively in the construction of any federal or provincial work;

(b) any vehicle while being used exclusively in the transportation of:

- unprocessed farm products produced by the vehicle owner from the point of production to market or to any point of transshipment;
- unprocessed sea products taken or produced by the vehicle owner from the point of landing or production to market or a point of transshipment;
- unprocessed trees, logs, pulpwood, pitprops, poles, or similar forest products;

(c) any vehicle which is owned or used by or for a farmer, fisherman, or lumberman and normally used for one or more of the purposes set out in clause (b); or

(d) any vehicle which is used exclusively for the transportation of goods and chattels BONA FIDE the property of the owner of the motor vehicle.

In addition, there is the provision that the Commission may, by order, exempt other uses of a motor bus or motor truck not listed above. Furthermore, it may prescribe terms and conditions under which the Act does not apply to a motor carrier. Under these provisions, according to information provided by representatives of the government of Prince Edward Island, both road salt and beer have become exempt commodities.

Section 12 of the Act provides that the Provincial Secretary may appoint inspectors to enforce the Act and Regulations. Section 14 deals with the cancellation of registration permits. Section 14(2) provides that after investigation and at least eight days notice to the vehicle owner, the Commission upon finding that a public motor truck has been operated without license, may issue a certificate of such finding to the Department of the Provincial Secretary. The latter is required to suspend immediately the vehicle registration, recovering the license plates, until a proper license is obtained. Section 14(3) provides for similar action in cases where a vehicle operated by a motor carrier is found to be carrying goods not authorized by the license, or is unsuited or is not properly equipped for the safe carriage of any goods being carried by it.

Section 16 provides that all licensed motor carriers shall equip their vehicles in accordance with the provisions of the Highway Traffic Act and such other standards and equipment as the Commission may determine. Section 18 provides that all public vehicles shall be equipped with an approved fire extinguisher. Section 21(2) provides a minimum age for drivers of 18, and Section 21(3) requires that they hold a valid chauffeur's license. Section 25 delegates to the Lieutenant-Governor-in-Council the power to make regulations under the Act on a wide range of matters.

Section 26 of the Act deals with tariffs. It provides that no tolls shall be charged until a tariff has been filed and approved by the Commission. The Commission has the authority to approve any tariff in whole or in part. Section 27 provides the requirement that a proper bill of lading be used. Somewhat unusual, this Section provides that "no explosives shall be carried except in compliance with the Explosives Act". Section 28 provides for penalties. The fine for the first offence is $25.00, for the second, $50.00, and for subsequent offences, $200.00. Section 31 provides for exemption from municipal tax. Section 32 requires the reporting of all accidents to the Commission.

The Regulations issued under the Statute essentially parallel the Act itself, and therefore do not need to be discussed with one exception. With regard to tolls, there is a discrepency between the Act and Regulations. The Act requires that tariffs be filed and approved. However, Regulation 10(1) specifies that:

> Licensed motor carriers shall not demand, receive or tender for the transportation of commodities at any rate other than those which have been accepted for filing by the Commission not later than 15 days after their effective date. (emphasis supplied)

The Act gives the appearance of offering some protection for the users of transportation services from motor carriers exploiting their competitive position. The regulations, however, do not since they suggest, that in the case of motor trucks anyway, simple filing is all that is necessary before a tariff can become effective.

The paper The Institutional Framework of the Canadian Trucking Industry, Volume I: The Public Sector provides some additional information which should be noted. It points out that the membership of the Commission is three, one of whom is appointed as Secretary. It further notes that a license application may be granted in whole or in part, so that the Commission has the power to impose conditions. It further notes that the license, once granted is permanent, there being an automatic renewal of the plates upon payment of the required fee. Finally, it suggests that the power to disallow tariffs has not been employed in the case of trucking.

5.2 The Act in Practice

Information on the recent activities under the Motor Carrier Act has been extracted from the Annual Reports of the Public Utilities Commission. These data are set out in Table 5.2.1. The data cover the period from the fiscal year 1975-76 through the fiscal year 1979-80. At the outset, it is to be noted that the only information provided by these reports deals with the question of motor carrier licensing. No information on the question of rate filing or rate approval is contained in the documents. The implication of this omission appears to be that the rates are automatically filed with the Board, and that the process is of routine nature and no records are available on activities. This condition also implies that there is no approval requirement and hence, there is little if any protection for the users of transportation services.

The licensing data will be discussed under three headings: applications for initial licensing; applications for extensions of temporary operating authority; and, applications for approval of transfers of licenses.

With respect to initial licensing, the number of applications ranged from 31 to 49, averaging 41 per year over the period under review. Grants of initial operating authority ranged from 75% to 98% of the number of applications, averaging 82% over the period. The second most common disposition of the cases was withdrawal of the application by the applicant. There were 19 cases of such action over the period. Taking the five years as a whole, the Commission declined to grant operating authority in only nine cases, representing only 4.4% of the applications for initial licensing.

Turning to extension of temporary operating authority, requests for these ranged between 19 and 42 over the period under review. Approvals

Table 5.2.1

LICENSING ACTIVITY UNDER THE MOTOR CARRIER ACT - PROVINCE OF PRINCE EDWARD ISLAND

(Fiscal years 1975/76 to 1979/80)

			Number of Occurences		
Activity	1975/76	1976/77	1977/78	1978/79	1979/80
Applications	64	64	98	93	76
Initial Licensing					
Applications	40	31	49	46(1)	39
Approved	30	28	48	35(1)	28
Denied	1	4	1	2	1
Withdrawn	9	0	0	8	2
Dismissed	0	0	0	1(2)	0
Pending	0	0	0	0	7
Adjourned	0	0	0	0	1
Extensions					
Applications	19	26	42	39	26
Approved	17	25	39	38	21
Denied	2	1	3	1	1
Other	0	0	0	0	4
Transfers					
Applications	5	6	8	7	12
Approved	5	6	7	6	10
Denied	0	0	1	1	1
Pending	0	0	0	0	1
Licensed Revoked	12	19	11	17	9
Total Firms Licensed	407	416	453	470	493

(1) Includes one license granted after judicial appeal.

(2) It was determined license was not required.

ranged from 81% to 97% of the applications, averaging 91% over the period. During the five years, only nine applications for extensions were turned down.

The final category to be discussed deals with license transfers. Cases here were far less numerous, ranging from 5 to 12. The approval rate over the period averaged 91%. Over the five years, the Commission denied only three applications for license transfer.

Data on the breakdown of initial licenses granted by type of license, classified as to whether the holder was a resident or non-resident of the province, have been extracted from the Annual Reports of the Public Utilities Commission for the last five fiscal years. These data are shown in Tables 5.2.1 and 5.2.2. It should be noted that there are minor differences between the totals in Table 5.2.1 and Table 5.2.2. These discrepancies are contained in the Commission Reports.

Table 5.2.2

INITIAL LICENSE GRANTED BY
CATEGORY OF LICENSE AND
CLASSIFICATION OF RESIDENCE TYPE

Year	Extraprovincial Resident	Extraprovincial Non-Resident	Intraprovincial Resident	Both Resident
1975/76	21	2	2	5
1976/77	20	0	2	5
1977/78	39	7	1	1
1978/79	26	3	2	3
1979/80	24	1	1	4
Total	130	13	8	18

Over the five year period, 169 grants of operating authority were given by the Commission. Of these, 130, or 77%, were made to non-residents for extraprovincial operations. The balance of the licenses, 39 or 23% , were given to residents of the province of Prince Edward Island. Of these, 13 were for extraprovincial operation, 8 were for intraprovincial operation, and 18 carried authority to operate in both spheres. It has not been possible to break down the applications for licensing on this same basis, so there is no indication as to how the denials of operating authority would be divided.

If this information were available, it would be possible to analyse the denial of application by classification of residence. That analysis should give some indication as to whether the Commission is operating in such a way as to protect the interest of resident carriers. If rate application data were also available, the analysis could be extended to assess whether in awarding the licenses, the interests of the users were also being protected.

5.3 Summary and Conclusions

The Motor Carrier Act and associated Regulations have been examined in this section. In addition, the operation of the Act, to the extent which the available data permit, has also been reviewed.

At the outset, various possible justifications for the regulation of this sector of the Prince Edward Island economy were suggested. The time has come to review the relevant provisions of the Act, and the recent practice to determine whether or not these criteria are being satisfied.

Firstly, there is the justification that the users of transportation services require protection from the carriers, and that this protection ought to take the form of rate control. While there is provision in the Prince Edward Island legislation for rate approval, no such power exists in the Regulations issues pursuant to the Act. Furthermore, there is no indication that rate control has been practised in this jurisdiction in the recent past at least, and so the process fails to meet the test of this justification.

Secondly, there is the justification that firms require protection from each other, chiefly, from the inroads which would be made by destructive competition. This, in turn, implies some sort of minimum rate control, or the definition of rate floors. No mention of such is made in either the Act or the Regulations, and there have been (apparently) no cases before the Commission dealing with the issue within the relevant time period. Again, the regulatory process fails to meet the test of this justification.

Thirdly, there is the suggestion that entry control is necessary in order to protect the existing carriers. In its usual form, this argument suggests that there needs to be internal cross-subsidization by the carriers between the denser and more profitable routes and the less dense and less profitable ones so that, overall, the firm can earn a satisfactory rate of return. There is entry control in the case of Prince Edward Island, but an examination of the data reveal that most applications are approved, and that the second most common disposition of cases is withdrawal. In the five year period, only nine license applications were denied, and one of these was subsequently awarded on judicial appeal. Entry control, then, is not stringent. However, the cross-subsidization argument requires exit control as well as entry control, and it is here that the Prince Edward Island situation breaks down. There is no exit control in the for-hire trucking segment, and so this test of justification fails as well.

Finally, it is sometimes suggested that the purpose of regulation is to permit the orderly development of the industry, to permit some sort of rough balancing of capacity and demand, since theoretically, the existence of excess capacity is held to have undesirable side effects. A review of the legislation and regulation reveals, however, a complete absence of capacity control, without adopting the tenuous argument that entry control performs this function. Thus, the regulatory process fails to meet this justification as well.

By way of final comments, the lack of research capability by the Board should be noted. The lack of adequate data regarding commodity flows by truck was discussed elsewhere in this report. There is the need, all across Canada, for improved data in this important sector, a need which can only be satisfied by some type of trucking waybill analysis. This requires immediate attention, and should be carried out at the provincial level. However, if this is impossible, it may well be that the analysis will have to be carried out by the Canadian Transport Commission.

Chapter 6

ECONOMIC PERFORMANCE OF THE INDUSTRY

This chapter of the report examines the economic performance of the trucking industry domiciled in the province of Prince Edward Island. It begins with the consideration of some very rough productivity measures which will provide some indication of the efficiency of the Prince Edward Island industry relative to that found in other jurisdictions and to that nationally. A second part of the chapter considers economic performance as measured by a variety of financial ratios. As in the case above, comparisons are drawn to the situation prevailing in other jurisdictions, and to the situation nationally. A final section of the chapter summarizes and draws conclusions from the analysis.

In many of the tables which follow, the various measures employed are presented for all three classes of trucking operation and for the industry as a whole as it is domiciled in various jurisdictions. At the same time, it must be recalled that there were no firms domiciled in Prince Edward Island of Class I size during the study period. As a consequence, while the data for Class I firms appear in the tables, they will not be discussed. They are included only to allow the reader to make broader comparisons. This leads to a second point. The data on the total industry must be treated with some caution in the Prince Edward Island case because of the absence of Class I firms. If this is not done, errors of interpretation may well be made. The reader is cautioned to focus on the relative performance of the Class II and Class III sized firms with comparison also being possible between the two. With these cautions in mind, the economic performance of the industry domiciled in the province of Prince Edward Island may be assessed.

6.1 Some Rough Productivity Measures

Data which provide a rough indication of the productivity of the trucking industry for 1975 are shown in Table 6.1 for Prince Edward Island, Canada, and other selected provinces. They show revenue per employee, revenue per dollar of assets, revenue per dollar of employee compensation, and (for 1976), revenue per mile. Some background discussion is required before the data are considered.

In the first place, as was pointed out earlier, the mileage figures published by Statistics Canada for 1975 are unreliable. As a consequence, in order to make a longitudinal comparison possible, the 1976 data were substituted in this case. In the second place, care must be taken in making comparisons involving any given ratio between provinces, or even among classes. This is the case because of the differing cost structures of the segments of the industry, and in particular, because of the differing role played by the broker across the country or across classes. It has not been possible to make adjustments to the data to eliminate this difference.

Table 6.1

MOTOR CARRIERS FREIGHT: SELECTED PRODUCTIVITY MEASURES CANADA AND SELECTED PROVINCES - 1975

(million dollars)

Class	Revenue / Employee ($)	Revenue / Dollar of Assets ($)	Revenue / Dollar Employee Comp. ($)	Revenue* / Mile ($)
Class I				
P.E.I.	-	-	-	-
N.B.	52.219	1.84	5.55	4.08
Québec	27.189	1.30	2.32	1.55
Ontario	30.991	1.55	2.39	1.92
Alberta	44.387	1.67	3.57	1.91
Canada	32.129	1.55	2.54	1.91
Class II				
P.E.I.	24.740	1.19	2.93	(1)
N.B.	32.733	1.86	3.44	1.24
Québec	28.036	1.74	2.55	1.29
Ontario	34.234	1.70	2.88	1.14
Alberta	44.579	2.04	3.52	1.32
Canada	33.556	1.81	2.91	1.27
Class III				
P.E.I.	24.087	1.67	2.87	0.98
N.B.	29.506	1.62	3.34	0.97
Québec	25.591	1.46	2.82	1.03
Ontario	28.348	1.59	2.90	0.95
Alberta	33.707	1.59	3.34	1.19
Canada	28.272	1.52	2.94	1.04
All Classes				
P.E.I.	24.250	1.52	2.88	-
N.B.	39.374	1.80	4.22	1.84
Québec	27.078	1.45	2.49	1.33
Ontario	31.149	1.58	2.52	1.57
Alberta	41.596	1.74	3.51	1.53
Canada	31.647	1.59	2.68	1.53

* 1976, see text.

(1) Revenue for this class not published separately.

Source: Calculated from data presented in: *Motor Carriers - Freight and Household Goods Movers*, Statistics Canada, 1975.

The first measure considered is revenue per employee. In the case of Class II firms, the Prince Edward Island revenue per employee was only 73.7% of the Canadian average in 1975. Alberta ranked highest in this measure, and the Prince Edward Island figure was only 55.5% of the Alberta figure. Class II operations in Québec most closely paralleled those in the Prince Edward Island case, the latter being 88.2% of the former. Class III firms in Prince Edward Island fare much better. Their average revenue per employee was 85.2% of the national figure, 71.5% of the Albertan one, and 94.1% of the Québec average. However, in this case as well, Prince Edward Island had the lowest average. Overall, it seems fair to conclude that, for this measure at least, the industry has a lower productivity than that found in other parts of the country.

The second measure considered is the ratio of operating revenues to value of assets. In more familiar terms, this is the output-capital ratio. Class II firms in Prince Edward Island have a lower ratio of output to capital than any of the other jurisdictions considered. They were only 65.7% as efficient as those nationally, and 58.3% as efficient as those in Alberta. The situation was vastly different in the case of Class III firms in 1975. In this instance, the Prince Edward Island firms were the most efficient of those considered, being 9.9% above the Canadian average. In passing, it should be noted that the Class III average in the case of Prince Edward Island exceeds the Class I average at the national level. Despite the absence of Class I firms, overall, the Prince Edward Island revenues per dollar of assets is only 4.4% below the national average.

The third measure, revenue per dollar of employee compensation, can be viewed as a second measure of labour productivity. It is different from the first in that it allows for wage differentials related to productivity differentials among various sub-groups of the total industry. In the case of Class II firms, Prince Edward Island ranks third here, behind Alberta and New Brunswick. In fact, Prince Edward Island is 0.7% above the national average. In the case of Class III firms, Prince Edward Island is below the national average but higher than Québec. Overall, Prince Edward Island ranked third in this measure, following only New Brunswick and Alberta when this measure was employed.

The final measure employed here is average revenue per mile. Data available for Class II carriers did not permit this calculation for firms domiciled in the province of Prince Edward Island for 1976. In the case of Class III firms, Prince Edward Island ranked fourth behind Alberta, Canada and Québec in 1975. It performed better than either Ontario or New Brunswick.

Overall, Prince Edward Island firms scored lowest in the first measure of productivity employed, revenue per employee. When output per dollar of capital was considered, Prince Edward Island ranked last in the Class II group, but first in the Class III group out of the jurisdiction included. When revenue per dollar of employee compensation was used, Class II Prince Edward Island firms did marginally better than the national average, while Class III firms did somewhat less well. Finally, Prince Edward Island Class III firms ranked in the middle of the group included in terms of average revenue per mile. No consistent pattern emerged for the 1975 case. Performance of the industry domiciled in the province of Prince Edward Island was a function of the measure employed.

Table 6.2

MOTOR CARRIERS FREIGHT: SELECTED PRODUCTIVITY MEASURES CANADA AND SELECTED PROVINCES - 1978

(million dollars)

Class	Revenue / Employee ($)	Revenue / Dollar of Assets ($)	Revenue / Dollar Employee Comp. ($)	Revenue* / Mile ($)
Class I				
P.E.I.	-	-	-	-
N.B.	64.149	2.49	4.80	5.29
Québec	35.651	1.71	2.21	2.30
Ontario	49.156	1.70	2.49	2.29
Alberta	62.842	1.71	3.50	2.77
Canada	43.511	1.75	2.59	2.45
Class II				
P.E.I.	49.618	1.97	4.40	1.46
N.B.	48.985	2.09	3.80	1.64
Québec	38.955	1.52	2.68	1.55
Ontario	42.173	1.65	2.86	1.51
Alberta	54.942	2.50	3.39	1.72
Canada	44.324	1.73	2.97	1.64
Class III				
P.E.I.	35.007	1.57	3.66	0.93
N.B.	40.050	2.22	3.73	1.04
Québec	35.721	1.61	3.03	1.30
Ontario	35.733	1.83	3.14	1.30
Alberta	42.860	1.69	3.47	1.44
Canada	37.929	1.76	3.20	1.32
All Classes				
P.E.I.	39.856	1.72	3.94	1.37
N.B.	54.262	2.35	4.34	2.47
Québec	36.294	1.65	2.41	1.88
Ontario	41.031	1.70	2.60	1.97
Alberta	55.612	1.85	3.47	2.09
Canada	42.596	1.75	2.74	2.00

Source: Calculated from data presented in: Motor Carriers - Freight and Household Goods Movers, Statistics Canada, 1978.

The above analysis was repeated for the year 1978, and the results are set out in Table 6.2. For Class II operations, the Prince Edward Island revenue per employee ranked second to Alberta, being 11.9% above the national average. In the case of Class III firms, however, Prince Edward Island remained the smallest of those included, being 7.7% below the Canadian figure. Despite the absence of Class I firms, overall, average revenue per employee was greater in Prince Edward Island than in Québec with both falling below the national average.

Turning to revenue per dollar of assets, one finds that for Class II firms, Prince Edward Island ranked third, behind Alberta and New Brunswick, and above the national average by 13.9%. In the case of Class III, Prince Edward Island performance was the lowest of the jurisdictions included, being 10.8% below the national figure. Overall, despite the absence of Class I carriers, the industry in Prince Edward Island performed better using this measure than either the Québec or Ontario industries.

When the measure employed was revenue per dollar of employee compensation, which is second proxy for labour productivity, Prince Edward Island exceeded the national level of performance by 48.1%. In Class III it ranked second, exceeding the national figure by 14.4%.

The final measure was revenue per mile. In both Class II and Class III, Prince Edward Island was the lowest of the jurisdictions included. In Class II, it fell short of the national average by 11.0%. In the case of Class III, it was below the Canadian figure by 29.5%.

Between 1975 and 1978, the relative position of the industry as domiciled in Prince Edward Island improved relative to the national industry. In terms of revenue per employee, Class II firms moved upward to rank second only to Alberta. While Class III firms remained lowest in rank among the jurisdictions included, even here the gap between national and provincial performance narrowed significantly. Viewed from the perspective of revenue per dollar of assets, Prince Edward Island Class II firms improved their performance, while Class III firms' performance declined relative to that of Canada. The firms in Prince Edward Island made substantial gains in the other measure of labour productivity as well. In terms of revenue per dollar of employee compensation, Class II firms moved from third place to first, and the gap between the provincial and national figures increased dramatically. In the case of Class III firms, Prince Edward Island moved from last among those included to second. Similar improvements were not made in average revenue per mile, Prince Edward Island remaining lowest among those included. Overall, it can be concluded that the industry domiciled in Prince Edward Island compares favorably in terms of efficiency with that at the national level.

6.2 Financial Performance of the Industry

It is now necessary to turn attention to the financial performance of the motor carrier industry domiciled in Prince Edward Island. By way of introduction, and to provide some basis for comparison, selected corporate ratios for four sectors are shown in Table 6.3. These data are generated from income tax returns and are for incorporated firms only. The sectors

Table 6.3

SELECTED FINANCIAL RATIOS FOR VARIOUS SECTORS OF CANADIAN ECONOMY - 1978

(percentages)

Ratio	Truck Transport	Transport Sector	Manufacturing Sector	Total - 182 Industries
Fixed Assets to Equity	116.1	132.1	61.0	105.4
Long Term Debt to Equity	44.9	55.1	33.4	51.2
Interest to Total Cost	1.8	3.9	1.7	2.7
Current Assets/Current Liabilities	9.0	120.0	130.0	110.0
Before Tax Profit/Capital Employed	12.3	5.6	11.0	7.6
Before Tax Profit/Equity	18.8	9.2	15.9	13.5
Before Tax Profit/Total Income	4.2	5.7	3.4	6.7
After Tax Profit/Capital Employed	9.3	4.2	8.2	5.8
After Tax Profit/Equity	14.1	6.8	11.8	10.3
After Tax Profit/Total Income	3.1	4.3	2.5	5.1

Source: Statistics Canada, 61-207.

chosen as a basis for comparison are truck transport, the transportation sector as a whole, the manufacturing sector, and the total for 183 industries. While these data are available for a number of years, only those for 1978 are shown here.

As the table shows, truck transport has a higher ratio of fixed assets to equity than either the manufacturing sector or the industrial total. It is, however, lower than the total transport sector. In addition, it has a lower debt to equity ratio than either the total transport sector or the total of all industries. This ratio is higher than that in the manufacturing sector. The same pattern emerges when one considers interest payments as a proportion of total cost. The next statistic is the liquidity ratio, and it is generally accepted that a ratio of one is satisfactory. Here, the trucking industry falls below that level, while the other sectors are considerably above it.

When one considers the relationship between before tax profit and the three commonly employed measures, the trucking sector performs better than the other three, with the transport sector as a whole ranking last of those considered when computed against capital employed and equity. Ratioed to total income, trucking ranks third behind all industries and the total transport sector. The same pattern holds when one considers the ratio of after tax profits to the three denominators.

Data for the motor carrier industry, broken out by class and by jurisdiction, showing the first three financial ratios noted above, are shown in Table 6.4 for 1975 and 1978. Data for the ratio of interest costs to total costs are not available. As before, Class I data are included in the table for the benefit of the reader despite the absence of carriers of that size in the province of Prince Edward Island. These data will be discussed only in passing where it is felt that comparisons among classes could provide additional information in the Prince Edward Island situation.

Turning first to the ratio of fixed assets to equity, there are two things notable about the Class II data from Prince Edward Island. In the first place, in both 1975 and 1978, the ratio was higher in this case than in either New Brunswick or Canada. Secondly, between the two years, the ratio increased in the case of Prince Edward Island when it declined in the other two jurisdictions. In 1975, the ratio was higher in all cases in Class II Prince Edward Island operations than elsewhere among jurisdictions included with the exception of Class I Québec carriers. In 1978, Prince Edward Island Class II carriers were exceeded only in the cases of New Brunswick Class I and Class III segments of the industry. In the case of Class III carriers, Prince Edward Island had the lowest ratio of the jurisdictions shown in both years.

In 1975, Prince Edward Island carriers had the second lowest ratio of debt to equity among Class II operations, and the lowest in the Class III category. By 1978, the ratio in Class II had increased by about 2.5 times, while that for the other jurisdictions had declined. There was also a modest increase in the debt to equity ratio in the case of Prince Edward Island Class III carriers.

Table 6.4

SELECTED FINANCIAL RATIOS - FOR-HIRE TRUCKING JURISDICTIONS LISTED - 1975 AND 1978

(percentages)

Category/Area	Fixed Assets / Equity		Long Term Debt / Equity		Current Assets / Current Liabilities	
	1975	1978	1975	1978	1975	1978
ALL CLASSES						
Canada - corp.	-	116.1	-	44.9	-	90.0
Canada - all	211.5	241.9	103.4	104.7	91.7	92.2
Canada - top 100	222.0	211.7	115.9	108.9	94.5	97.6
P.E.I. - all	215.4	236.8	61.8	84.5	66.8	67.9
N.B. - all	219.4	330.8	97.5	153.4	87.2	80.5
Québec - all	269.0	207.3	150.2	118.6	89.0	110.3
Ontario - all	179.0	274.6	70.5	115.5	90.9	85.3
Alberta - all	202.3	239.8	97.7	116.8	95.9	97.2
CLASS I						
Canada	219.1	218.4	114.0	113.3	95.6	96.1
New Brunswick	261.7	7 586.6	156.9	4 729.1	97.9	79.4
Québec	416.5	226.5	150.2	153.2	89.0	125.2
Ontario	179.0	205.7	70.5	88.6	90.9	85.3
Alberta	189.8	177.0	93.5	88.1	104.4	118.0
CLASS II						
Canada	202.9	188.0	85.8	78.9	93.2	88.1
P.E.I.	284.7	333.7	55.8	141.7	42.6	72.1
New Brunswick	165.1	127.8	50.7	32.6	86.5	105.9
CLASS III						
Canada	197.5	234.5	103.4	102.7	91.7	77.9
P.E.I.	186.9	209.7	64.1	68.7	82.3	64.5
New Brunswick	282.8	334.5	96.6	133.1	62.8	63.9

Source: Line 1 - Statistics Canada, 61-207. Other - Statistics Canada, 53-222.

Turning to the current ratio, one finds that it was lowest, among all classes and jurisdictions presented, in the case of Class II carriers domiciled in Prince Edward Island in 1975. While it remained at the second lowest in 1978, it had improved considerably between the two years. In 1975, the current ratio among Prince Edward Island Class III firms was higher, but declined sharply to 1978.

Before and after tax profits relative to capital employed, equity and total operating income for a variety of jurisdictions in 1975 are presented in Table 6.5. It is immediately obvious from the table that Class II profits in the Prince Edward Island case were negative in that year. As a result, the measures used all have negative values, the only such negative values among the cases considered in the table. Prince Edward Island Class III performance was much better. All three ratios were higher in the Prince Edward Island case than nationally, or, it might be noted in passing, in the case of New Brunswick Class III operations. In the aggregate, the profits of Class III were greater than the losses in Class II so that overall, the industry domiciled in Prince Edward Island was profitable. The ratios were, however, considerably lower in the Prince Edward Island case than elsewhere.

Equivalent data for 1978 are shown in Table 6.6. In this case, the Class II industry domiciled in the province of Prince Edward Island earned positive profits, though the level of performance was far below that for the segment of the industry in Canada as a whole. As the situation in 1975, the Class III part of the industry domiciled in Prince Edward Island performed far better than the industry nationally and considerably better than the industry in New Brunswick as well. Taking the industry domiciled in Prince Edward Island as a whole, it can be seen that it performed better than others included in the survey when the measure employed was before tax profit as a percentage of total income. With respect to the other two measures, overall, the industry domiciled in Prince Edward Island ranked second to that in New Brunswick in performance, with both being substantially better than that elsewhere among jurisdictions included.

In summary, it might be noted that comparisons between the industry domiciled in Prince Edward Island and elsewhere are sensitive to the measure employed. Measured in terms of the ratio of fixed assets to equity, Prince Edward Island Class II firms rank first among those included in the analysis. Class III carriers, however, ranked last. With the exception of Class II in 1978, the debt of equity ratio tended to be lower in Prince Edward Island. Offsetting these facts was the fact that the current ratio tended to be lower in Prince Edward Island, and substantially below 1.0 as well, a situation not generally regarded as reflecting financial health.

It was also shown that Class III profitability ratios were higher in Prince Edward Island, while Class II ratios tended to lie below both Canada and New Brunswick.

6.3 Summary and Conclusions

This chapter has examined the economic performance of the trucking industry domiciled in the province of Prince Edward Island using a variety of measures. Comparisons were drawn to the level of performance of firms in other jurisdictions as well.

Table 6.5

MEASURES OF BEFORE TAX AND AFTER TAX PROFITABILITY - MOTOR CARRIERS 1975 DATA FOR CANADA AND SELECTED PROVINCES BY CLASS

Category/Area	Before Tax Profit as a Percentage of			After Tax Profit as a Percentage of		
	Capital Empl.	Equity	Total Income	Capital Empl.	Equity	Total Income
ALL CLASSES						
Canada - corp.	5.8	8.5	2.3	5.3	7.8	2.1
Canada - all	13.9	24.9	5.4	N/A	N/A	N/A
Canada - top 100	10.4	22.8	4.9	6.6	14.4	3.1
P.E.I. - all	4.8	7.8	1.6	N/A	N/A	N/A
N.B. - all	16.3	32.2	4.8	N/A	N/A	N/A
Québec - all	7.6	19.1	3.1	N/A	N/A	N/A
Ontario - all	13.2	22.4	5.4	N/A	N/A	N/A
Alberta - all	12.9	25.4	4.7	N/A	N/A	N/A
CLASS I						
Canada	11.7	25.0	4.9	7.3	15.7	3.1
New Brunswick	14.5	37.3	4.2	7.0	18.0	2.0
Québec	8.5	33.4	4.0	3.2	12.7	1.5
Ontario	12.1	20.5	5.2	8.1	13.7	3.5
Alberta	17.0	32.8	7.0	11.0	21.3	4.6
CLASS II						
Canada	12.8	23.7	4.0	8.4	15.6	2.6
P.E.I.	(12.2)	(19.0)	(4.2)	(12.9)	(20.1)	(4.5)
N.B.	13.1	19.8	4.2	8.5	12.8	2.7
CLASS III						
Canada	14.0	24.9	5.4	N/A	N/A	N/A
P.E.I.	16.6	27.2	5.5	N/A	N/A	N/A
N.B.	13.1	25.8	3.7	N/A	N/A	N/A

Source: Line 1 - Statistics Canada, 61-207, balance calculated from "Motor Carriers: Freight". Bracketed figures are losses.

Table 6.6

MEASURES OF BEFORE TAX AND AFTER TAX PROFITABILITY - MOTOR CARRIERS 1978 DATA FOR CANADA AND SELECTED PROVINCES BY CLASS

Category/Area	Before Tax Profit as a Percentage of			After Tax Profit as a Percentage of		
	Capital Empl.	Equity	Total Income	Capital Empl.	Equity	Total Income
ALL CLASSES						
Canada - corp.	12.3	18.8	4.2	9.3	14.1	3.1
Canada - all	11.9	24.3	5.1	N/A	N/A	N/A
Canada - top 100	7.4	16.0	2.9	4.2	9.0	1.6
P.E.I. - all	30.3	56.0	9.4	N/A	N/A	N/A
N.B. - all	31.6	80.0	5.2	N/A	N/A	N/A
Québec - all	0.8	1.8	0.3	N/A	N/A	N/A
Ontario - all	17.5	37.7	5.4	N/A	N/A	N/A
Alberta - all	17.6	38.1	5.6	N/A	N/A	N/A
CLASS I						
Canada	8.9	18.9	3.2	4.0	8.6	1.4
N.B. - all	45.5	2 196.1	4.8	42.5	2 054.3	4.5
N.B. - general freight	38.1	3 106.0	4.1	N/A	N/A	N/A
Québec	(7.2)	(18.1)	(3.0)	(9.9)	(25.1)	(4.1)
Ontario	13.4	25.4	4.9	8.0	15.1	2.9
Alberta	16.3	30.6	6.1	10.1	19.0	3.8
CLASS II						
Canada	16.9	30.2	5.6	11.6	20.7	3.8
P.E.I.	4.0	9.7	0.9	3.9	9.3	0.8
N.B.	30.4	40.3	9.4	22.6	30.0	7.0
CLASS III						
Canada	16.8	43.0	9.4	N/A	N/A	N/A
P.E.I.	33.0	55.6	12.4	N/A	N/A	N/A
N.B.	21.0	48.9	4.3	N/A	N/A	N/A

Source: Line 1 - Statistics Canada, 61-207, balance calculated from data in "Motor Carriers: Freight" and data provided by the Canadian Transport Commission.

In terms of revenue per employee, Class II firms in Prince Edward Island ranked second only to Alberta in 1978, while Class III firms ranked last among those included. Class II firms in Prince Edward Island also compared favorably in 1978 with their counterparts elsewhere, in terms of revenue per dollar of assets and revenue per dollar of employee compensation. With respect to the former, Class III firms were much weaker, while in respect of the latter, they ranked second in 1978. However, in terms of revenue per mile, Prince Edward Island firms ranked lowest of those included. The level of performance is, then, a function of the particular measure employed. There appears to be no consistent pattern.

Before tax profits, and where possible, after tax profits, were measured against capital employed, equity, and total operating income for 1975 and 1978. In both years, Class II profitability ratios were lower in Prince Edward Island than nationally or in New Brunswick. Class III profitability ratios were higher in Prince Edward Island than in these other two jurisdictions.

Overall, it appears safe to say that Prince Edward Island performance, relative to that in other areas, is mixed. Various measures yield no consistent pattern. It should be noted, however, that the relative performance of the industry domiciled in Prince Edward Island improved considerably over the period under review so that comparisons tended to be generally more favorable in 1978 than they were in 1975.

Chapter 7

OBSERVATIONS ON THE TRUCKING SUBSIDY PROGRAMS

7.1 Introduction

A detailed exhaustive analysis of the trucking subsidy programs for freight originating in 'select territory' cannot be conducted on the basis of the information available. As a consequence, this section will be limited to making a number of observations on the various trucking subsidy programs, and suggesting where further research might be useful.

The Atlantic Region Freight Assistance Programs are an outgrowth of a set of recommendations made by the four Altantic premiers to the Minister of Transport in Some Elements of an Atlantic Region Transportation Policy in March of 1969. Prior to that time, the freight subvention program, the Maritime Freight Rates Act, had been available to the rail mode only, and it is generally agreed that this discriminatory assistance was one of the major causes for the retardation of the growth of the trucking industry in Atlantic Canada. The basic trucking westbound subsidy program was implemented in 1969. The intra-regional trucking subvention was introduced in 1971-72. Additional selective assistance was initiated in April 1974 for both rail and truck. In 1978, the concept of a blanket intra-regional subsidy was eliminated. For those commodities deemed eligible to receive special assistance, this resulted in no changes in the program. However, for those excluded, there was a phase-out period structured such that on September 1, 1978, the rate of assistance for the excluded commodities were reduced to 7.5% (from the previous 15%). On September 1, 1979 the subsidy was eliminated.

Until the fiscal year 1972-73, the total subsidy payments made to the rail mode exceeded those made to trucking. In the following year, the total trucking subsidy exceeded rail for the first time. Since that time, the proportion of assistance paid to trucking has been steadily rising, reaching 77.6% of the total assistance in the fiscal year 1979-80. Between 1971-72 and 1979-80, total freight subventions for the region increased by 204%. Assistance paid to rail increased from 13.1 million to 21.7 million, an increase of 65.6%. Payments to the trucking industry, on the other hand, rose from 7.0 million to 39.1 million.

The greatest proportion of payments are made for shipments within the select territory. During 1979-80, 63.6% of the rail payments were on intra-select territory movements. In the same year, 72.6% of the truck subventions went for shipments inside select territory. The average for both modes was 63.8%. Five years previous, the intra-shipments had accounted for an even higher 71% of total subsidy payments.

The magnitude of the payments, and the growth in these amounts, suggest that a detailed study of the program would be a useful area of research. Such a study is beyond the scope of the current investigation. To be a reliable evaluation of the program, it would have to be undertaken on a commodity-by-commodity basis and most probably on a market-by-market basis as well. It would need to consider production costs as well as transportation and other distribution costs, not only within the region, but also at competitive supply points. Only with data to that level of detail would an evaluation of the impact of the subsidy programs be possible.

This section of the report has more limited ambitions. It seeks to determine the importance of the subsidy program to the Prince Edward Island domiciled trucking industry and a discussion of the provincial breakdown of subsidy payments. This analysis is on the basis of a range of commodity groups. Consideration is given to the effective (as opposed to nominal) rate of transportation assistance. These questions are considered in order.

7.2 Importance of Subsidy Payments to the Trucking Industry

Subsidies paid to Prince Edward Island domiciled trucking firms in 1978 are shown in Table 7.2. In the case of Class II trucking firms domiciled in Prince Edward Island, the subsidy payments accounted for 10.1% of total operating revenue. It accounted for 5.0% of Class II operating revenues, and 7.1% of this total for the industry considered as a whole. In the case of Class II firms, the subsidy payments received were almost twice the net operating revenues, while they accounted for 40.3% of them in the case of Class III. Overall, subsidy acounted for 75.5% of net operating income. Finally, it should be noted that for Class II firms, the subsidy payments were almost 12 times the before tax profit. Equivalent data are not available for either Class II firms or for the industry as a whole.

For Class II firms taken together, and most probably for the industry as a whole, the subsidy payments spelled the difference between a profit and a loss for 1978. Admittedly, this comparison is not really fair, for the removal of the subsidy program would result in higher rates being charged to shippers. However, given the usual assumptions concerning the downward sloping nature of the industry demand curve, it is clear that one of the major impacts of the subsidy program relates to the profitability of the trucking industry domiciled in the province of Prince Edward Island.

7.3 Atlantic Region Freight Assistance Payments Through Time

It is also instructive to examine the changes which have occurred in the various subsidy payments through time. Data for the various programs, covering the period 1977-78 through 1979-80 are shown in Table 7.3 for Prince Edward Island and Canada as a whole. In the aggregate, the share of the total subsidy payments received by Prince Edward Island domiciled truckers has declined through time, from 3.2% of the total in the initial year to 2.5% in the final year. Furthermore, in absolute terms, the amount received fell between 1978-79 and 1979-80 by almost $149 000, or 13.5%. It is also clear that Prince Edward Island's share of westbound assistance has been falling. Carriers domiciled there received 1.4% of the regular westbound assistance in 1977-78 and 2.7% of the selective assistance in the same year. In 1979-80, these figures were 0.7% and 1.1%, respectively.

Table 7.2

IMPORTANCE OF THE FREIGHT SUBSIDIES TO MOTOR CARRIER INDUSTRY - PRINCE EDWARD ISLAND DOMICILED FIRMS - 1978

(thousand dollars)

	Class II	Class III	Industry
Operating Revenue	3 373.90	4 796.50	8 170.40
Operating Expenses	3 201.80	2 200.10	7 401.90
Net Operating Revenue	172.10	596.40	768.50
Profit/Loss Before Tax	29.00	N/A	N/A
Subsidy Payments	330.70	240.40	580.10
Provision for Income Tax	0.80	N/A	N/A
Subsidy/Oper. Revenue	10.1%	5.0%	7.1%
Subsidy/Net Oper. Revenue	197.4%	40.3%	75.5%
Subsidy/Before Tax Profit	1 171.4%	N/A	N/A

Source: Statistics Canada, Motor Carriers - Freight and Household Goods Movers, 1978, and data provided by the Canadian Transport Commission.

Table 7.3

ATLANTIC REGION FREIGHT ASSISTANCE - TRUCK SUBSIDY PAYMENTS BY DOMICILE PRINCE EDWARD ISLAND AND CANADA, 1977-1978 AND 1979-1980

(thousand dollars)

Year and Program	Prince Edward Island ($)	Canada ($)	P.E.I./Canada (%)
1977-78			
A.R.F.A.	65.6	4 541.0	1.4
A.R.S.A.	36.2	1 340.4	2.7
A.R.S.T.A.	725.4	19 618.0	3.7
Total Assistance	818.4	25 499.0	3.2
1978-79			
A.R.F.A.	84.8	7 130.1	1.2
A.R.S.A.	38.0	2 384.1	1.6
A.R.S.T.A.	781.4	19 512.1	4.0
A.R.S.S.P.A. Selective	132.9	6 218.4	2.1
A.R.S.S.P.A. Provisional	67.1	1 133.7	5.9
Total Assistance	1 104.1	36 378.4	3.0
1979-80			
A.R.F.A.	56.1	7 530.7	0.7
A.R.S.A.	28.7	2 571.4	1.1
A.R.S.T.A.	28.8	959.2	3.0
A.R.S.S.P.A. Selective	686.2	22 956.5	3.0
A.R.S.S.P.A. Provisional	155.4	3 716.1	4.2
Total Assistance	955.3	37 733.8	2.5

Notes:
A.R.F.A. - Atlantic Region Freight Assistance
A.R.S.A. - Atlantic Region Selective Assistance
A.R.S.T.A. - Atlantic Region Special Transportation Assistance
A.R.S.S.P.A. - Atlantic Region Special Selective and Provisional Assistance

Source: Data provided by the Canadian Transport Commission.

Most of the assistance received by Prince Edward Island trucking firms is paid on intra-regional shipments. These accounted for 88.4% of the 1977-78 payments, and 91.1% of the 1979-80 payments. Both are higher than the regional average. By contrast, 23.3% of the total assistance received by firms domiciled in New Brunswick in 1979-80 was paid for westbound movements. For all firms domiciled in Canada, 26.8% of the Atlantic Region Freight Assistance Act payments received were for westbound shipments.

7.4 The Intra-Select Territory Subsidy Program

It is with respect to this component of the overall program that most of the policy changes have occurred in the past. Until 1969, there were no rate subvention policies applicable to highway transport. In that year, the ARFAA was passed, and a westbound subsidy made available to highway transport. In 1971, the program was extended to cover intra-regional truck movements, and the rate of subsidy was reduced from 20% to 17.5%. In 1975, the rate was further reduced to 15%, and a small shipment exemption was introduced. Effective September 1, 1978, the intra-regional program was made selective. Provisional assistance was made available for those commodities deemed not eligible to receive selective assistance to provide for an adjustment period.

Despite the fact that the volume of expenditures is far larger in the case of the intra-regional program, available data are somewhat sketchy. Such data available for the province of Prince Edward Island are shown in Table 7.4. These data are subsidy payments made in connection with Prince Edward Island originating or terminating intra-select territory shipments. They are not to be confused with the data in Table 7.3, which are payments made to trucking firms domiciled in Prince Edward Island. In the context used, the term regulated means common carrier, while the term unregulated means a contract carrier or an exempt carrier. In other words, these terms have a different meaning from that used in the economic regulation chapter.

In dealing with the table, some caution should be exercised. It has been generated from data produced through a 5% sample of claims for 1977. The sampling procedure has, at least in the case of Prince Edward Island, resulted in some omissions. For example, it is known that there are potato movements by truck from that province to Newfoundland, and yet there are no subsidy payments shown for Prince Edward Island to Newfoundland shipments. With this in mind, the table can be discussed.

The first thing which is obvious is the high proportion of intra-provincial shipments. In the case of regulated trucking, 49.1% of Prince Edward Island originating traffic is destined to another point in the province. This figure falls to 31.3% when unregulated carriage is considered, and the average of the two is 46.6%. While this is substantial, it should be noted that it is far below the 80.4% of intraprovincial shipments recorded in New Brunswick. It is also instructive to note that in total, the subsidy paid on goods moving into the province was more than three times that paid on shipments moving out, allowance being made for the intraprovincial shipments.

The table also presents expenditures for the intra-regional program as a whole. Prince Edward Island related shipments received very little of the totals. In the case of the regulated component, it received only 1.6%

Table 7.4

ATLANTIC REGION FREIGHT ASSISTANCE PAYMENTS - INTRA-ATLANTIC REGION MOVEMENTS - PRINCE EDWARD ISLAND BY CARRIER TYPE AND TOTALS - 1977

(thousand dollars)

Province of Origin or Destination	Intra-Regulated		Intra-Unregulated		Intra Total	
	P.E.I. Origins	P.E.I. Dest.	P.E.I. Origins	P.E.I. Dest.	P.E.I. Origins	P.E.I. Dest.
Newfoundland	0	4	0	0	0	4
Prince Edward Island	192	192	20	20	212	212
Nova Scotia	106	300	14	6	120	306
New Brunswick	90	362	30	14	120	376
Québec (Gaspé)	3	1	0	0	3	1
Totals, P.E.I. Movements	391	859	64	40	455	899
Intra P.E.I./Total P.E.I.	49.1%	22.4%	31.3%	50.0%	46.6%	23.6%
A.R.F.A. Total Payments		12 380		7 907		20 287
P.E.I./A.R.F.A. Totals		1.6%		0.3%		1.0%

Source: Data on which this table is based were provided by the Canadian Transport Commission.

of the total amount. In unregulated carriage, it received even a smaller share, 0.3%. When both are combined, Prince Edward Island received only 1.0% of the total outlay in 1977.

7.5 The Westbound Subsidy Program

As has been previously noted, the westbound trucking assistance program began in 1969. Initially, the rate of subvention was set at 30% pro rata on distance, the same proportion as was being received by the railways under the Maritime Freight Rates Act. In April of 1974, the rate of westbound assistance was increased to 50% pro rata on distance for certain selected commodities moving westward from the Atlantic Provinces. The rates of subsidy noted above are nominal rates, for the assistance is only paid on that portion of the movement east of a line drawn from Lévis to Diamond Junction in Québec. The effective rates of subsidy tend to be much lower, and are a function of the proportion of the total movement inside select territory and the nominal rate. For example, on a movement where half the distance is inside select territory and the balance west of it, the effective rate of subvention would be half the nominal rate - 15% or 25% depending on the program into which a particular commodity falls.

The regular (or 30%) westbound subsidy program will be considered first. Once this has been done, attention will be directed to the selective westbound program. Finally, the overall program will be evaluated.

Data for Prince Edward Island, New Brunswick, and Gaspé origins, as well as for the total regular program, are shown in Table 7.5.1. The table shows, somewhat surprisingly, that 49.7% of the total regular westbound subsidy payments made in 1977 were made for Gaspé originating shipments. Prince Edward Island originating shipments, on the other hand, received only 2.0% of the total payments. When tonnages are considered, the gap is even wider. Gaspé accounted for 68.6% of the total tonnage moved under the program, while Prince Edward Island accounted for only 0.8%. Unfortunately, mileage figures are unavailable, so the question of the proportion of ton miles accounted for by the different areas cannot be addressed.

Subsidy-per-ton figures are presented in the table as well, but in the absence of mileage data, these are difficult to interpret. Distances are, of course, a crucial requirement for the interpretation of these data. One can hypothesize in the case of Prince Edward Island, for example, that a large proportion of the total shipments are moving into the Toronto market. Most of the Gaspé shipments, on the other hand, would appear to be to other parts of Québec, and hence of shorter distance. To a large extent, this would explain the difference in the subsidy-per-ton figures given in the table.

In the absence of information on length of haul, it is necessary to employ a proxy for the effective rate of subsidy. The ratio of subsidy payments to total charges would seem to be the best one available. It does suffer from the deficiency that rates are not necessarily proportionate to distance for a variety of reasons. As an approximation, however, this ratio should be satisfactory. It suggests that, on the average, the effective rate of subsidy in the case of Prince Edward Island shipments is 11.4%. In turn, this implies that about 38% of the total distance lies in select

Table 7.5.1

ATLANTIC REGION FREIGHT ASSISTANCE ACT - REGULAR WESTBOUND SUBSIDY, SELECTED PROVINCES AND TOTAL ASSISTANCE - 1977

Item	P.E.I. Origins	N.B. Origins	Gaspé Origins	Total
Weight (tons)	2 016.50	44 544.80	192 323.60	280 211.60
Billed Revenue (000$)	444.40	3 316.40	9 232.00	18 828.00
Subsidy (000$)	57.20	482.40	1 433.20	2 885.20
Total Charges (000$)	501.20	3 798.80	10 665.20	21 713.20
Subsidy per ton ($)	27.13	10.83	7.45	10.30
Subsidy/Billed Revenue (%)	12.90	14.50	15.50	15.30
Subsidy/Total Charges (%)	11.40	12.70	13.40	13.30
Tonnage Moved (%)	0.80	15.90	68.60	100.00
Subsidy Received (%)	2.00	16.70	49.70	100.00

Nominal Rate of Subsidy: 30% on portion of movement east of Lévis/Diamond Junction.

Source: Raw data provided by the Canadian Transport Commission.

territory. In the case of Gaspé, the effective rate of subsidy is estimated at 13.4%, implying that about 45% of the total distance is within select territory.

Data on the selective westbound subsidy program are shown in Table 7.5.2 for the same origins as before. The distribution of subsidy received by province of origin is markedly different in this case. Under this program, New Brunswick accounts for 42.4% of the total subsidy and 43.8% of the tonnage moved. The Prince Edward Island shares are 9.8% and 6.3% , both considerably higher than in the regular westbound case. Gaspé accounted for 17.1% of the subsidy and 32.8% of the tonnage moved.

One surprising result is that the subsidy per ton figures are lower in the case of the selective assistance program than in the case of the regular program despite the difference in the rate of subvention. This is a question which will be returned to later on when the specific commodity groupings are discussed.

Turning attention to the proxy for the effective rate of subsidy, it can be seen that the ratio of subsidy to total charges is higher than in the regular westbound case. For Prince Edward Island, it is 27%. This implies that approximately 54% of the total distance was within select territory, compared to the approximately 38% in the case of the regular westbound program. In turn, this implies a shorter total distance, and would explain part of the difference in the subsidy-per-ton figure. In the case of New Brunswick, the effective rate of subsidy was 19.8% while in Gaspé, it was 18.6%. This suggests that 39.6% and 37.2% of the mileages, respectively, were within select territory. In the previous case, the estimates were 42.3% and 45%, respectively.

Finally, to get some idea of the overall distribution of the benefits of the program, these two sets of data were combined. The data so generated, for the same geographical breakdown as before, are presented in Table 7.5.3. Immediately, it must be noted that while the ratio of subsidy to total charges has been computed, it is no longer a proxy for the effective rate of subsidy, for there exists no single rate of subsidy against which to compare it. A weighted average does exist for any given year, but longitudinal comparisons are impossible. These data are provided for the purposes of information only.

Viewed from this aggregate point of view, New Brunswick and Gaspé both receive the same fraction of the total subsidy payments made on westbound shipments, 31.3%. Prince Edward Island received 6.4% of the total. Gaspé has the most subsidized tonnage, accounting for 44.7% of the total. New Brunswick accounts for 34.5% of the total, while Prince Edward Island accounts for 4.5%.

Prince Edward Island has the highest ratio of subsidy to total charges, 22.8%. New Brunswick follows with 17.5% and the ratio is 14.7% for Gaspé. In passing, it might be noted that Prince Edward Island receives the highest subsidy per ton, followed (in order) by New Brunswick and Gaspé.

There are some anomalies in the westbound data presented so far. It appears that the best way in which to resolve these is to consider the question from the point of view of subsidy payments made for major commodity

Table 7.5.2

ATLANTIC REGION FREIGHT ASSISTANCE ACT - SELECTIVE WESTBOUND SUBSIDY, SELECTED PROVINCES AND TOTAL ASSISTANCE - 1977

Item	P.E.I. Origins	N.B. Origins	Gaspé Origins	Total
Weight (tons)	35 504.80	247 234.00	185 486.00	564 684.40
Billed Revenue (000$)	994.80	6 459.60	2 824.80	13 439.60
Subsidy (000$)	368.40	1 595.60	644.80	3 763.60
Total Charges (000$)	1 363.20	8 055.20	3 469.60	17 203.60
Subsidy per ton ($)	10.38	6.45	3.48	6.66
Subsidy/Billed Revenue (%)	37.00	24.70	22.80	28.00
Subsidy/Total Charges (%)	27.00	19.80	18.60	21.90
Tonnage Moved (%)	6.30	43.80	32.80	100.00
Subsidy Received (%)	9.80	42.40	17.10	100.00

Nominal Rate of Subsidy: 50% on portion of movement east of Lévis/Diamond Junction.

Source: Raw data provided by the Canadian Transport Commission.

Table 7.5.3

ATLANTIC REGION FREIGHT ASSISTANCE ACT - REGULAR AND SELECTIVE WESTBOUND SUBSIDY,
SELECTED PROVINCES AND TOTAL ASSISTANCE - 1977

Item	P.E.I. Origins	N.B. Origins	Gaspé Origins	Total
Weight (tons)	37 611.20	291 778.80	377 809.60	844 896.00
Billed Revenue (000$)	1 439.20	9 776.00	12 056.80	32 267.60
Subsidy (000$)	425.60	2 078.00	2 078.00	6 648.80
Total Charges (000$)	1 864.40	11 854.00	14 134.80	38 916.80
Subsidy per ton ($)	11.32	7.12	5.50	7.87
Subsidy/Billed Revenue (%)	29.70	21.30	17.20	20.60
Subsidy/Total Charges (%)	22.80	17.50	14.70	17.10
Tonnage Moved (%)	4.50	34.50	44.70	100.00
Subsidy Received (%)	6.40	31.30	31.30	100.00

Source: Raw data provided by the Canadian Transport Commission.

group movements. Groups of commodities are considered, as opposed to single commodities, because of the availability of more information concerning them. The only data made available to the consultant on the leading commodities shipped were the subsidy payments themselves.

7.6 Subsidization of Selected Westbound Commodity Group Movements

In order to provide a greater insight into the workings of the westbound subsidy program, it is necessary to consider the subsidization of selected commodity groups in greater depth. The basis for the selection of the groups is the proportion of total subsidy paid on a provincial basis, presenting data as well on the most important destination provinces. Of the three provinces discussed above, the Prince Edward Island case is considered in detail in Table 7.6. For the purposes of comparison, some commodity group data from New Brunswick and Gaspé are presented as well.

An examination of the table immediately reveals that in the case of the regular westbound subsidy program, only three Prince Edward Island commodity groups are included. These three, however, accounted for 85.3% of the subsidy paid to commodities moving westbound from Prince Edward Island under this program in 1977. The two commodity groups shown in the selective westbound part of the table for Prince Edward Island account for 97.3% of the subsidy paid under that program for commodities moving westbound from Prince Edward Island. In other words, by far the greatest proportion of the total payments have been included in the table.

The commodities shipped under the regular assistance program illustrate the notion of the effective rate of subsidy very well. The miscellaneous freight category, for example, has effective rates of subsidy ranging from 5.6% to Alberta destinations on the one hand to 14.1% in the case of Ontario destinations. The average for the group is 7%. Waste and scrap materials, a somewhat odd inclusion under a subsidy program designed to bolster the positions of Atlantic Region manufacturers, merchants and traders, receives a subvention of 18.3%. Food and kindred products have an effective rate of subsidy of 16.5%. It should be noted that the subsidy per ton on waste and scrap materials is low, being less than 10% of that on miscellaneous freight.

The same three commodities are most important in the case of the New Brunswick westbound shipments. As in the case of Prince Edward Island, waste and scrap materials have the highest rate of subvention, and the lowest subsidy per ton of the commodities listed. Miscellaneous freight shipments receive a subsidy per ton not appreciably different from the Prince Edward Island case, though the effective rate of subsidy is somewhat higher. Farm products were the most important commodity from Gaspé subsidized under this program, and received a very high level of subsidy per ton. The effective rate of subsidy was, however, low.

Turning to the selective program, only two commodity groups need to be discussed in the Prince Edward Island case - farm products and food and kindred products. In both instances, shipments to Ontario, Québec and in total will be discussed. Overall, it should be noted that there is considerable consistency in the subsidy per ton figures. These range from a low of $9.13 in the case of farm products moving from Prince Edward Island

Table 7.6

REGULAR AND SELECTIVE WESTBOUND SUBSIDY DATA FOR LEADING COMMODITY GROUPS
PRINCE EDWARD ISLAND AND OTHER AREAS - 1977

Commodity Group and Program	Destination or Total	Weight (tons)	Billed Rev. ($000)	Subsidy ($000)	Total Charges ($000)	Subsidy per ton ($)	Subsidy Bill.Rev. (%)	Subsidy/ Tot.Charges (%)
P.E.I. Regular Westbound								
Food/Kindred Products	Total	190	21.8	4.3	26.1	22.63	19.7	16.5
Waste/Scrap	Total	635	14.7	3.3	18.0	5.20	22.4	18.3
Misc. Freight	Alberta	95	85.0	5.0	90.0	52.63	5.9	5.6
	Ontario	488	174.9	28.6	203.5	58.61	16.4	14.1
	Total	723	364.9	41.1	406.0	56.85	11.3	7.0
P.E.I. Selective Westbound								
Farm Products	Ontario	7 696	243.6	78.6	322.2	10.21	32.3	24.4
	Québec	8 808	177.1	80.4	257.5	9.13	45.4	31.2
	Total	16 504	420.7	159.0	579.7	9.63	37.8	27.4
Food/Kindred Products	Ontario	7 344	253.3	71.8	325.1	9.78	28.3	22.1
	Québec	10 704	291.5	127.6	419.1	11.92	43.8	30.4
	Total	18 048	544.8	199.4	744.2	11.05	36.6	26.8
N.B. Regular Westbound								
Misc. Freight	Total	3 517	1 743.2	189.5	1 932.7	53.88	10.9	9.8
Food/Kindred Products	Total	4 933	207.3	41.2	248.5	8.35	19.9	16.6
Waste/Scrap	Total	6 033	137.4	27.8	165.2	4.61	20.2	18.7
N.B. Selective Westbound								
Food/Kindred Products	Total	109 948	3 631.1	807.0	4 438.1	7.37	22.2	18.2
Farm Products	Total	25 923	346.7	145.5	491.2	13.34	42.1	29.6
Gaspé Regular Westbound								
Farm Products	Total	760	537.2	62.8	600.0	82.63	11.7	10.5
Gaspé Selective Westbound								
Food/Kindred Products	Total	103 145	876.9	201.7	1 077.6	1.96	23.0	18.7

Source: Canadian Transport Commission Data.

to Québec to $11.92 in the case of food and kindred products moving to Ontario. The estimates of the effective rate of subsidy are well-grouped as well. These range from a low of 22.1% in the case of food and kindred products moving into Ontario to a high of 31.2% in the case of farm products moving into Québec. Differences in the proportion of the total distance within select territory is the major explanation for this difference.

The same two products appear in the New Brunswick section of the table. Here, the subsidy per ton on farm products is almost twice that on the food and kindred products group. In the selective program, Gaspé receives a low subsidy per ton, $1.96 on food and kindred products, though it should be noted that the rate of subsidy is not substantially different from that paid in the New Brunswick case for this commodity.

To a large extent, the apparent anomalies noted earlier concerning the westbound programs are explained by the great diversity among the commodity groups making up the total origins for the various provinces. The large Gaspé subsidy payments are the result of large flows of a limited number of commodities, coupled with the fact that the economy in question is, in many respects, much like the economy of New Brunswick.

7.7 Specific Commodity Movements

Finally, it is necessary to consider briefly the subsidization of the most important westbound commodity flows. The only data available here are subsidy payments by commodity. These are sufficient, however, to permit some observations. The data are shown in Table 7.7.

Before the data are discussed, it is necessary to review briefly the objectives of the subsidy program. The Atlantic Region Freight Assistance Act is really an outgrowth of the Maritime Freight Rates Act which began in 1927. Parallel trucking assistance was provided under the former program in order to remove the discriminatory nature of the latter. The intent of the Maritime Freight Rates Act was to permit Maritime manufacturers, merchants and traders access to the whole Canadian market. Viewed in this light, the program can be thought of as an early attempt to stimulate trade in the Atlantic Region. The data in Table 7.7 will be discussed with this in mind.

Viewed in this light, it can be said that all of the commodities listed under the selective program appear to meet this objective, for all of them involve the shipment of newly produced commodities into markets west of select territory. It is not possible to make definitive statements concerning the degree to which the subsidy program enhances market penetration on the basis of the data which are presently available. There is some question about the accuracy of these data, for in total, these five leading commodities account for only 20.9% of the total selective westbound subsidy payments. The estimated subsidy payment appears to understate by a considerable margin the subsidy on potato shipments.

In the case of the regular subsidy program, the five commodities account for about 21% of the total payments for Prince Edward Island shipments under this program. As before, the accuracy of the data are not known. However, on the basis of the available data contained in the table,

Table 7.7

LEADING COMMODITIES RECEIVING SUBSIDY - REGULAR AND SELECTIVE WESTBOUND ASSISTANCE PROGRAMS, PRINCE EDWARD ISLAND - 1977

P.E.I. - Select	$ 37 542.61	Potatoes, other than sweet
	$ 32 416.87	Frozen vegetables
	$ 2 505.93	Canned or preserved fruits, vegetables or seafood
	$ 2 369.78	Canned vegetables
	$ 2 099.19	Canned or preserved fruits
P.E.I. - Regular	$ 10 269.88	Household goods
	$ 816.05	Metal scrap, wastes or tailings
	$ 269.09	Misc. manufactured products
	$ 265.34	Canned fish or other seafood
	$ 223.78	Carcasses (whole or parts)

Source: Data provided by the Canadian Transport Commission.

one must conclude that the regular assistance program is not meeting the objectives set out in the preamble to the Maritime Freight Rates Act. Of the roughly $12 000 listed in the table, 92% was expended for the movement of either household goods or waste and scrap materials. It is most difficult to relate the movement of these commodities to economic stimulus efforts, and it is suggested that they should be removed from the list of those eligible to receive the rate subvention.

At this juncture, it would be desirable to review the question of small shipments from both the intra-regional and westbound point of view. In 1975, a small shipment exemption was initiated in the case of the intra-program, and shipments where the transportation cost to the shipper was less than ten dollars were excluded. Given the escalation in transportation charges since that time, many of the shipments which were excluded in 1975 would be eligible for subsidy in 1981. It is suggested that the small shipment exemption for the intra-program be reviewed, and that consideration be given to extending it to the westbound program as well. It appears that a billed revenue of $25.00 would be a reasonable lower limit for the exemption. However, to preclude a repetition of the previous experience, it is suggested that the minimum shipment size be indexed, by means of a transportation charges index to be worked out by FPCART, so that the lower limit is maintained in real terms in the future.

7.8 Summary and Conclusions

The amount of subsidy paid under the variety of trucking assistance programs available is of considerable magnitude, and has been increasing rapidly through time. Given the probable future increases in trucking costs, it is likely to increase substantially in the future as well. This suggests that there is the need for a detailed study of the programs to determine their effectiveness so as to get the greatest possible benefit from the dollars expended. Such a study needs to be carried out at a very detailed level, focusing on specific commodities and markets.

In Prince Edward Island, for Class II firms, and most probably for the industry as a whole, the subsidy payments spelled the difference between a profit and a loss in 1978. Any changes in the programs must, therefore, take into acount the impacts on the industry. Most of the assistance paid for Prince Edward Island shipments is for movements within the select territory, in fact, within the Maritime provinces. A much lower proportion, therefore, is paid on westbound shipments.

An examination of the intra-regional subsidy program revealed that a high proportion of the subsidy is paid for intra-Prince Edward Island shipments. However, the data here needs to be interpreted with caution, for, while there are significant potato movements to Newfoundland, no subsidy expenditures were shown in the data for Prince Edward Island to Newfoundland shipments. Shippers in Prince Edward Island receive little benefit from the program. Prince Edward Island originating shipments accounted for only 1.0% of the total expenditure under this program.

It was seen that with respect to the regular westbound subsidy, commodities originating in Prince Edward Island received only 2.0% of the total assistance payment. The subsidy received per ton shipped, however, was the largest of the three provinces considered. The effective rate of subsidy proxy was lowest of the three provinces in the Prince Edward Island case, reflecting the greater proportion of the average shipment distance outside select territory.

When the selective westbound assistance program is considered, it was shown that Prince Edward Island shipments received 9.8% of the total assistance paid. Again, the subsidy-per-ton figure was the highest of those included, as was the proxy for the effective rate of subsidy. When both programs are combined, Prince Edward Island origins receive 6.4% of the total assistance paid. It ranked first in both of the other measures employed.

Subsidy payments made in the movement of specific commodity groups and specific commodities were also considered, the former in greater detail because of the availability of more data. Under the regular program, it was found that three commodity groups accounted for 85.3% of the total subsidy. The concentration was even greater in the case of the selective program where two commodities accounted for 97.3% of the total subsidy. This examination resolved many of the apparent anomalies identified in the earlier work. With respect to specific commodities moving under the selective westbound program, while there do appear to be data problems, it seems fair to take the position that the program does meet the test of expanding the markets for Prince Edward Island produced commodities. The same does not appear to be the case for the regular westbound program where 92% of the expenditures made for Prince Edward Island originating commodities relate to the movement of household goods and waste and scrap materials. It is difficult to relate either to economic stimulus efforts.

In conclusion, it does appear that there are weaknesses in the existing program which merit further study. One of these relates to the movement of goods not related to current production. The inclusion of household goods and waste and scrap materials in a subsidy program of this nature is questionable, and the impact of their removal on the industry should be examined in depth. There is also a strong case for increasing the size of the small shipment exemption, indexing it so that it remains constant in real terms, and extending it to the westbound program. An exemption threshold of $25.00 was suggested.

Data do not exist which permit an analysis as to other possible changes in any of the subsidy programs. While it can be argued that changes are necessary in view of the ever-mounting costs of the program, changes should not be made until such time as their impact can be assessed.

APPENDICES

Appendix A

OUTLINE OF RE-CODED COMMODITY LABELS FROM THE STANDARD COMMODITY CLASSIFICATION SYSTEM

The following listing outlines the commodity codes that were used to summarize the 1979 Origin-Destination Study data. The codings are listed in terms of their 2-digit STCC Commodity Values as contained in Volume 1 of the Standard Commodity Classification Manual.

Code	Title	STCC Division Code	STCC Title
0		00	Live Animals
01	Meat	01	Meat and Meat Preparations
03	Fish	03	Fish
04	Other Marine	04	Other Marine
05	Dairy Products	05	Dairy Products, Eggs & Honey
06	Grains	06	Cereal Grains
07	Foodstuffs	07	Fruit
		08	Nuts
		09	Vegetables
		10	Sugar
		11	Cocoa, Coffee, Tea
		12	Margarine
		14	Other Foods
15	Feed	15	Feed and Fodder
17	Beverages	17	Beverages
18	Tobacco	18	Tobacco
20	Animal Products	20	Crude Animal Products Inedible
21	Vegetable Products	21	Crude Vegetable Products
23	Crude Wood	23	Crude Wood Materials
24	Textiles	24	Textile & Related Fibres
25	Metals	25	Metal ores
26	Coal Crude	26	Coal, Crude Petroleum
27	Crude Non-metal	27	Crude Non-metallic Minerals
29	Scrap	29	Other Waste and Scrap Materials
30	Furs, Leather	30	Leather
		31	Furs, Dressed
		32	Rubber & Plastic Fabricated Materials
33	Wood Products	33	Wood Fabricate Materials
34	Pulp	34	Pulp
35	Paper	35	Paper and Paperboard
36	Textile Products	36-38	Textile Fabricated Materials Oils, Fats, Waxes, etc.
40	Chemicals	40-42	Chemicals and Related Products
45	Petrol Products	43	Petroleum and Coal Products
44	Metal Products	44	Iron, Steel and Alloys

		45	Non-ferrous Metals
		46	Metal Fabricated Basic Products
		47	Non-metallic Mineral Basic Products
		49	Miscellaneous Fabricated Materials
50	Machinery and Manufactured	50-96	All of Section 5, End Products Inedible
999	Unidentified		

Appendix B

THE ROADS ACT, 1965

AMENDMENTS TO REGULATIONS

(Approved by His Honour the Lieutenant-Governor-in-Council dated 1 May, 1975)

The Regulations made under the provisions of Section 53 of The Roads Act, 1965 (14 Eliz. II, Cap. 22) by His Honour the Lieutenant-Governor-in-Council on the 21st day of October, 1970, are hereby amended as follows effective 1 May 1975:

1. Sections 2, 3 and 4 of the Regulations are deleted in their entirety and the following substituted therefore:

2. No person shall operate on any highway outside a city or town a vehicle equipped with pneumatic tires, whether laden or without load not conforming to the Truck Diagrams hereto annexed as TABLES, and having,

(a) a gross weight in excess of the weight in pounds represented upon any registration permit issued with respect to the vehicle,

(b) a front axle weight in excess of 10 000 pounds except as provided for in Section 12 of these Regulations,

(c) in the case of a two-axle truck a rear axle weight in excess of 20 000 pounds as shown in TABLE 1,

(d) in the case of a truck, tractor, or semi-trailer and tandem axle weights in excess of those as shown in TABLE 2, 4, 5, 6,

(e) in the case of a tractor and triple axle semi-trailer axle weights in excess of those as shown in TABLE 7,

unless a permit has been issued pursuant to Section 46 of the Act.

3. (a) TANDEM AXLE: For the purposes of these Regulations a tandem axle is defined as being two consecutive axles each equipped with four tires of equal size with the distance between the centres of the two axles being 48 inches or more and less than 96 inches with both axles being individually attached

to a common attachment to the vehicle including a connecting mechanism to equalize the load between axles, but unless each axle is equipped with brakes, it is not a Tandem Axle.

(b) TRIPLE AXLE: For the purposes of these Regulations, a triple axle is defined as being three consecutive axles each equipped with four tires of equal size with distance between each centre being more than 40 inches with each axle being individually attached to a common attachment to the vehicle including a connecting mechanism to equalize the load between each axle, but unless each axle is equipped with brakes, it is not a Triple Axle.

4. TABLES OF PERMISSABLE WEIGHTS:

For the purposes of these Regulations, the TABLES which are hereto annexed showing the designated axle weights and gross vehicle weights are maximum permissable weights for the class of vehicle illustrated in the tables and also,

(a) where wheels are designated "S" this shall indicate two single wheels per axle.

(b) where wheels are designated "D" this shall indicate dual wheels equipped with four tires per axle.

(c) where wheels are designated "T" this shall indicate the presence of tandem axles as defined in these regulations,

(d) where wheels are designated "3" this shall indicate the presence of triple axles as defined in these regulations.

2. Add immediately following Section 11 of the Regulations the following as Section 12 and Section 13:

12. Front pneumatic tire width requirements for vehicles shown in TABLE 7 shall be as follows:

ACCORDING TO TIRE SIZE

MAXIMUM ALLOWABLE WEIGHT FOR FRONT AXLE

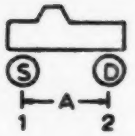
FRONT TIRE SIZE RATES WIDTH IN INCHES	ALLOWABLE FRONT AXLE LOADING IN POUNDS
8.25	10 000
9.00	10 800
10.00	12 000
11.00	13 000

13. No motor vehicle or combination of motor vehicles and/or semi-trailer with a gross weight in excess of 80 000 pounds shall be operated on any provincial highway other than,

13.1 Route 1 Borden to Charlottetown to Wood Islands,
13.2 Route 1A Borden to Summerside,
13.3 Route 3 Cherry Valley to Georgetown,
13.4 Route 4 from Route 3 to Montague,
13.5 Route 2 Charlottetown to Souris,
13.6 Route 2 Charlottetown to Kensington and Tignish,
13.7 Route 151 Elmsdale to Alberton,
13.8 Route 107 Read's Corner to Traveller's Rest,
13.9 Route 142 from Route 2 to O'Leary,
13.10 Route 121 from Sherbrooke to Summerside, via Granville Street

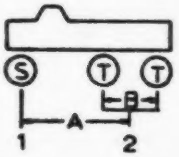
3. Appendix to the Regulations the following TABLES 1, 2, 3, 4, 5, 6 and 7:

Table 1



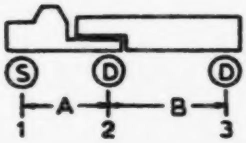
MINIMUM AXLE SPACING in Inches	AXLE WEIGHTS in Thousands of Pounds		GROSS WEIGHT in Thousands of Pounds
A	1	2	30
96	10	20	

Table 2



MINIMUM AXLE SPACING in Inches		AXLE WEIGHTS in Thousands of Pounds		GROSS WEIGHT in Thousands of Pounds
A	B	1	2	45
100	48	10	35	

Table 3



MINIMUM AXLE SPACING in Inches		AXLE WEIGHTS in Thousands of Pounds			GROSS WEIGHT in Thousands of Pounds
A	B	1	2	3	50
96	48	10	20	20	

13. No motor vehicle or combination of motor vehicles and/or semi-trailer with a gross weight in excess of 80 000 pounds shall be operated on any provincial highway other than,

13.1 Route 1 Borden to Charlottetown to Wood Islands,
13.2 Route 1A Borden to Summerside,
13.3 Route 3 Cherry Valley to Georgetown,
13.4 Route 4 from Route 3 to Montague,
13.5 Route 2 Charlottetown to Souris,
13.6 Route 2 Charlottetown to Kensington and Tignish,
13.7 Route 151 Elmsdale to Alberton,
13.8 Route 107 Read's Corner to Traveller's Rest,
13.9 Route 142 from Route 2 to O'Leary,
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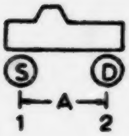
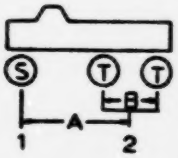
3. Appendix to the Regulations the following TABLES 1, 2, 3, 4, 5, 6 and 7:

Table 1



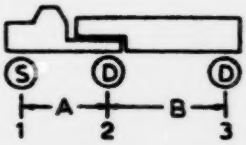
MINIMUM AXLE SPACING in Inches	AXLE WEIGHTS in Thousands of Pounds		GROSS WEIGHT in Thousands of Pounds
A	1	2	30
96	10	20	

Table 2



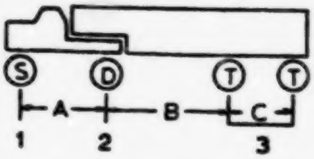
MINIMUM AXLE SPACING in Inches		AXLE WEIGHTS in Thousands of Pounds		GROSS WEIGHT in Thousands of Pounds
A	B	1	2	45
100	48	10	35	

Table 3



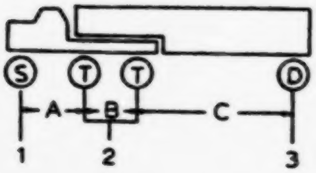
MINIMUM AXLE SPACING in Inches		AXLE WEIGHTS in Thousands of Pounds			GROSS WEIGHT in Thousands of Pounds
A	B	1	2	3	50
96	48	10	20	20	

Table 4



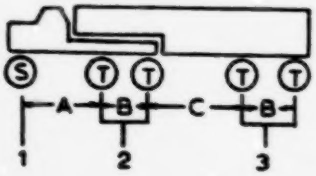
MINIMUM AXLE SPACING in Inches			AXLE WEIGHTS in Thousands of Pounds			GROSS WEIGHT in Thousands of Pounds
A	B	C	1	2	3	
84	108	48	10	20	35	65

Table 5



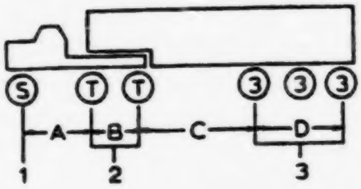
MINIMUM AXLE SPACING in Inches			AXLE WEIGHTS in Thousands of Pounds			GROSS WEIGHT in Thousands of Pounds
A	B	C	1	2	3	
96	48	120	10	35	20	65

Table 6



MINIMUM AXLE SPACING in Inches			AXLE WEIGHTS in Thousands of Pounds			GROSS WEIGHT in Thousands of Pounds
A	B	C	1	2	3	
96	48	144	10	35	35	80

Table 7



MINIMUM AXLE SPACING in Inches				AXLE WEIGHTS in Thousands of Pounds			GROSS WEIGHT in Thousands of Pounds
A	B	C	D	1	2	3	
120	48	144	96	10	35	44	89.0
120	48	144	144	10	35	51	96.0
126	48	156	192	10	35	60	105.0
120	54	144	96	10	36	44	90.0
120	54	144	144	10	36	51	97.0
132	54	156	192	10	36	60	106.0
120	60	144	96	10	37.5	44	91.5
120	60	144	144	10	37.5	51	93.5
138	60	162	192	10	37.5	60	107.5
126	72	150	96	10	40	44	94.0
126	72	150	144	10	40	51	100.0
144	72	165	192	10	40	60	110.0
132	48	144	96	12	35	44	91.0
132	48	144	144	12	35	51	98.0
132	48	156	192	12	35	60	107.0
132	54	144	96	12	36	44	92.0
132	54	144	144	12	36	51	99.0
132	54	156	192	12	36	60	108.0
132	60	144	96	12	37.5	44	93.5
132	60	144	144	12	37.5	51	100.5
132	60	162	192	12	37.5	60	109.5
138	48	144	96	13	35	44	92.0
138	48	144	144	13	35	51	99.0
138	48	156	192	13	35	60	108.0
138	54	144	96	13	36	44	93.0
138	54	144	144	13	36	51	100.0
138	54	156	192	13	36	60	109.0
138	60	144	96	13	37.5	44	94.5
138	60	144	144	13	37.5	51	101.5
138	60	162	192	13	37.5	60	110.5

THE FOR-HIRE TRUCKING INDUSTRY IN THE ATLANTIC PROVINCES

CASE 4

THE TRUCKING INDUSTRY IN THE PROVINCE OF NEWFOUNDLAND

Economic and Regulatory Environment

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May 1981

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INTRODUCTION

Comprehensive regulation of the Motor Carrier Industry in Newfoundland as it presently exists commenced with the passage of the Motor Carrier Act in 1970. This was about the same time the gulf ferries operations were in a position to handle standard tractor trailer units on a roll-on, roll-off basis, thus effectively providing the opportunity for the extraprovincial motor carrier industry to operate the same type of thorough door-to-door trucking services as on the mainland.

During the past 20 years or so, there were very substantial road building projects carried out in the province, but there still is a requirement for additional good quality paved highways. The Trans-Canada highway was completed in 1965 but there was considerable deterioration in it for some time afterwards. Upgrading is still taking place.

The Report of the Commission of Inquiry into Newfoundland Transportation stated [2] that "the trucking industry more than any other mode of transport has been in the process of evolution in this province and perhaps has not yet arrived at a stabilized state. The industry as a whole has been fragmented, with many small firms entering and leaving the business on a routine basis. This of course has meant that reliability and dependability were low and, in fact, it has been difficult to provide service at all to many parts of the province." [1]

Nevertheless since 1970, the rate of growth of the interprovincial trucking industry has been very substantial. The motor carrier industry has been especially effective in assisting the fishing industry in marketing its products for points beyond Newfoundland.

The purpose of the current study is to review both the economic regulations and the general regulations of the motor carrier industry in Newfoundland as of the present time, and to assess the need for such regulations, bearing in mind among other matters, the relatively late start in the growth of the motor carrier industry in Newfoundland vis-à-vis the rest of Canada.

Fundamentally, the Motor Carrier Act and Regulations regulates the motor carrier industry to a greater extent than in the other Atlantic Provinces. One major difference is that the Newfoundland Board may fix or approve freight charges, while the other Atlantic Provinces require the filing of rates only.

This study sets forth the view that regulation of the motor carrier industry in Newfoundland is still essential to the public interest. The motor carrier industry domiciled in Newfoundland is less profitable and less financially viable than the motor carrier industry domiciled in both Atlantic Canada and in Canada as a whole. Furthermore, the motor carrier industry is extremely important in assisting the fishing industry in the export of fish to the United States and to other Canadian destinations. The general public, because of geography, conditions of the highway system and thin density of population, are far from being overserviced by motor carriers and in fact, compared with most other locations in Canada, are underserved in many communities.

Chapter 1

BACKGROUND INFORMATION ON THE NEWFOUNDLAND MOTOR CARRIER INDUSTRY

The Sullivan Commission was established as a Commission of Inquiry, to advise the Federal Government, through the Ministry of Transport, concerning the problems of Newfoundland transportation and to make suggestions concerning their solutions. The Commission presented Volume 1 of their report in July 1978, and Volume 2 in February 1979.

Extensive work was done by the Sullivan Commission on all aspects of transportation in Newfoundland. In view of the information developed with respect to the motor carrier industry in the Sullivan inquiry, this chapter will draw heavily on the information in the Sullivan Report, especially as it relates to motor carrier regulation.

The Sullivan Report used data available at that time to the Commission, essentially 1977 and earlier. For the purposes of this chapter providing background information, tests have been made of the data in the Sullivan Report using more current information where available to ensure that there have been no fundamental changes in the situations mentioned. Unless otherwise noted in this report, the data as submitted by the Sullivan Commission still represents the situations as described, even though in absolute terms the data for subsequent years would show minor changes.

The report states [2] that over 90% of all trucking firms serving Newfoundland, including both intra and extraprovincial firms, provide irregular or unscheduled service to communities. However, the few large firms which provide regular service account for a substantial portion of the total trucks in use at any given time.

A company and vehicle profile of both intra-Newfoundland and extra-Newfoundland public carriers is shown for the years 1973 and 1977, as follows:

Table 1

COMPANY AND VEHICLE PROFILE [2]

	Intra-Newfoundland Profile			Extra-Newfoundland Profile		
Description	1973	1977	% Change	1973	1977	% Change
Number of Companies	479	344	-28%	80	140	+75%
Total Driving Units	1156	996	-14%	324	712	+120%
Average Driving Units per Company	2.4	2.8	+17%	4.1	5.1	+24%

Table 1 reveals a significant increase in the number of extra-Newfoundland carriers (+75%), and a considerable decline in the number of carriers operating within the province (-28%). The Sullivan Report states that Public Utilities Board officials indicate that over the past few years there has been a major decline in the number of intra-Newfoundland carriers owing to the high incidence of small firm consolidations. These mergers have resulted in 10 to 12 companies handling a large proportion of the total trucking market. Conversely, the number of extra-Newfoundland carriers has increased over the same period because of market demands for trucking services.

Over 80% of all carriers have less than six driving units. However, although there are significantly fewer large carriers, they account for a substantial proportion of the total number of driving units in service at a given time.

Transit times for vehicles have improved significantly over the past few years. [3] The report states that this has been due to a number of factors; the development of containerization, greater experience, more paved roads and competitive pressures. Previously, the industry was highly fragmented with many small firms providing service which was not always efficient. With the emergence of larger firms and a considerable reduction in the number of one-man carriers, a group of 12 carriers has captured most of the trucking market in Newfoundland.

The report also states [3] that another element that has led to an improvement in overall quality is the method of paying drivers. Many carriers serving Newfoundland extraprovincially do not employ salaried personnel to operate company owned vehicles, but instead hire owner-operators (brokers) who act as independent operators of their own vehicles within the firm. These owner-operators (brokers) haul freight in their own trucks for a portion of the billing to the customer with their remuneration measured by the mile or percent of the revenue, instead of the hour as for a regular employee.

The report [4] provides trends that have occurred in recent years for intraprovincial movements, incoming general cargo and outbound general freight for trucks.

(a) Intraprovincial - Truck tonnages have increased from 1 912 000 tons in 1964 to an estimated 7 800 000 tons in 1976. Rail on the other hand has declined from 696 000 tons in 1972 to 403 000 tons in 1976. Sea transport has also declined from 938 000 tons in 1963 to 479 000 tons in 1976. The increase in truck utilization accompanied by a decline in the other modes can be attributed to improvements made to the highway network over the time frame concerned, less dependence on the coastal boat as a means of basic transport, and a more favourable competitive position vis-à-vis the rail operation.

(b) Incoming General Cargo - Truck tonnages have increased from 2 000 tons in 1965 to 283 000 tons in

1976. Rail, on the other hand has declined slightly from 436 000 tons in 1965 to 409 000 tons in 1976. Total gulf traffic has increased from 438 000 tons in 1965 to 692 000 tons in 1976. The exceptionally large increase in truck traffic, especially since 1970, is accounted for by the fact that up until that time there was a severe impedance to truck travel caused by the inability of the Gulf ferries to handle large trucks and the rate structure for carriage of trucks on the ferries which effectively priced trucking out of the market.

(c) Outgoing General Freight - Trucking activity has taken a substantial jump since 1970 in the transport of freight from the province, with the tonnage rising from 2 000 tons in 1965 to 136 028 tons in 1976. Rail tonnages reached a peak in 1974 when 97 000 tons of freight were carried out of the island. By 1976, rail tonnages had declined to 70 000 tons. The report states [5] that the relatively large increase in the amount of truck traffic can be directly attributed to the capture by this mode of the export of fish products. Characteristics of the trucking industry have blended with the requirement of the fishing industry to such a degree that all other modes have been virtually displaced in the transportation of fish to Canadian and United States markets. Another significant factor which influenced the increase in truck traffic was the extension of the ARFAA to the trucking industry.

The Sullivan Report points out [6] that the growth of trucking as a mode for interprovincial goods movement has been far in excess of the annual growth of total freight moving into and out of the province. This would indicate that, compared with other modes, trucking is offering a service which meets the need of the user better than the other modes. The report goes on to point out that although there is a good deal of acceptance of the trucking industry, the industry is far from being without fault. Poor frequency and lack of regular scheduled service to the less populous areas of the province are two of the frequently mentioned complaints. While service on the Trans-Canada highway route is generally good for full-load shipments, less-than-truckload lots and all non Trans-Canada highway routes leave room for improvement.

The main problems with interprovincial shipments, particularly for less-than-truckload shipments, are the poor roads leading to many of these communities as well as the high costs incurred in trying to service these. [7]

The report also states [7] that, of the 140 companies licensed by the Public Utilities Board to operate interprovincially, none has chosen to operate under a scheduled license service. The report goes on to state that many of these interprovincial companies do in fact offer a regularly scheduled service as a matter of choice rather than as a condition of license.

One of the major contributions of the whole trucking industry in recent years has been as a service to the operation and development of the fishing industry. [7] The use of trucks for the pick-up of product from point of landing for delivery to final processing sites has become universally accepted for both the salt and fresh fish industries. Since many of the landing points are located in areas remote from the primary highway system, the problems of truck service are considerably heightened by lack of a good all-weather road system. The restrictions placed on the trucking companies by equipment limitations e.g., on some roads it is virtually impossible to operate tractor-trailers, and load limits add significantly to the cost of the finished product.

The report also states [7] that the trucking industry now carries a vast majority of fish products exported from Newfoundland (estimated to be 136 000 tons in 1976) - all in temperature-controlled vehicles. The major export markets are the U.S. for frozen fish and the Caribbean for salted fish. [8]

The report states [9] that the general absence of organized unions in the trucking industry, with the accompanying lower labour costs, has served to keep the operating costs of most trucking firms in the Atlantic area well below that of Central Canada. Comparative figures for the carriage of dry freight for the year 1978 (updated from the report figures of 1976) are as follows:

Table 2

OPERATING COST PER TRUCK MILE (¢) [21]

Type of Truck	Ontario	Québec	Maritimes	Newfoundland
2 Axle (Sample 75 000 miles)	202.9	187.6	146.2	133.0
5 Axle (Sample 150 000 miles)	138.3	130.0	105.7	103.6

As the heading of the table indicates, these figures are unit costs only and do not reflect load factors or the relative lengths of haul in the respective areas, or the related revenues in the respective areas.

The report goes on to state [9] that for the more populated centres of the province, competition for intraprovincial traffic is good and is reflected in the rate structure. For the remote areas, in addition to lack of competition, maintenance costs are usually high and as a result, rates are generally high. On interprovincial traffic, there is still an imbalance between incoming and outgoing freight though less for truck than for other modes. As a result, inbound rates have to be set to cover the costs of hauling empty returns. The main beneficiary of this rate structure has been the fishing industry which has been able to capitalize on what would ordinarily be the return of empty trucks. The extension of the freight rate subsidy by the Atlantic Region Freight Assistance Act (ARFAA) to trucking has been, where applicable, a very valuable aid in making trucking more competitive with rail. Since the subsidies apply only to public carriers and not to private ones, there has been some pressure placed on the private carriers to go public in order to qualify for subsidy.

The report states [9] that the trucking industry, which in Newfoundland was slow to develop, is a highly regulated but very loosely knit industry in terms of industry association. Competition between carriers, while growing rapidly, is not nearly as fierce as that in other provinces. There are many thin density areas in the province with only one or two carriers serving each point. The report states that it is relatively easy, especially for a local trucking firm, to obtain a license to operate within the province. (There is some evidence, such as the recent Midland Transport hearing, which indicates greater difficulty for an out-of-province trucking firm to obtain a license.)

The report goes on to state that the rather amorphous structure of the industry has some major impacts, as follows:

(a) Since all companies operate independently, interlining of freight is a problem;

(b) There is no formal method whereby industry-wide planning can be accomplished;

(c) Although there have been some attempts at uniform rate setting through the Atlantic Provinces Motor Carrier Tariff Bureau Ltd., currently there is no formal mechanism within the industry as a whole to permit a rate review. (Currently the Atlantic Provinces Motor Carrier Tariff Bureau isues Tariff 6000, a Class, F.A.K. & Commodity Tariff between localities in the province of Newfoundland, New Brunswick, Nova Scotia and Prince Edward Island with two participating carriers. Tariff 7000A Freight All Kinds & Commodity Tariff between localities situated in the province of Newfoundland with four participating carriers. Tariff 8000 Freight All Kinds, Class & Commodity Tariff between localities in the provinces of Ontario and Newfoundland with two participating carriers. Tariff 8020 Exempt Commodity Tariff from localities in the province of Newfoundland to localities in the U.S.A. with two participating carriers. In addition, the Québec Tariff Bureau Inc. issues Tariff 120-A Class & Commodity rates between the Québec and Atlantic Provinces regions with one participating carrier for Newfoundland traffic. The report goes on to state that because such a few number of carriers are participants in tariff bureaus, there are widely varying rates throughout the province); and

(d) The industry is not uniform throughout the province from a service standpoint. In areas where business is good, service is relatively good. In areas where volumes are low, service is often poor.

The report states [10] that the Public Utilities Board attempts to enforce the regulations for which it is responsible, but it is clear that there are no formal regulations which would ensure good service.

The report states [11] that the degree of dependability and reliability is not uniform throughout the system or the province. The opinions of those people interviewed by the Commission show that the railway is looked upon as the least reliable, with trucking being the most reliable. Also, reliability varies inversely with remoteness from the populated centres. In other words, the more remote, the less reliable the system becomes.

The report states [11] that there is a problem with respect to the movement of trucks on the CN Marine vessels. Here, the liability of CN Marine for damages, regardless of how they are caused, is limited to that contained in the Carriage of Goods by Water Act which at present is $500.00 per shipment. Because of this, truckers are reluctant to enter into an arrangement whereby the trailer part of the vehicle only would travel across the Gulf. [11]

The Appendix sets forth the summary of recommendations listed in the Sullivan Report in respect of the motor carrier industry in Newfoundland, [12] along with some general comments abstracted from the report which deal directly with the recommendations.

Analysis of the recommendations clearly reflects the view of the Sullivan Commission that continued motor carrier regulation within and to and from Newfoundland is an essential ingredient to the development of the fishing and other industries in the province, and that furthermore the Federal Government should ensure that adequate regulation is carried out in neighbouring jurisdictions also to assist the fishing industry in Newfoundland. The Sullivan Commission also points out the need in certain respects for even greater regulation of the motor carrier industry; in respect of service to certain areas coupled with scheduled deliveries, in respect of the need for the development of better statistics to enable proper evaluation of the industry, and also that greater emphasis should be placed on the policing of illegal trucking.

Chapter 2

PROFILE OF THE MOTOR CARRIER INDUSTRY IN NEWFOUNDLAND

The purpose of this chapter is to provide some insight into the motor carrier industry operating in Newfoundland. In addition, where appropriate, comparisons have been made in the different categories between Newfoundland Domiciled Carriers and the total of Atlantic Provinces Domiciled Carriers and the total of All Carriers in Canada.

2.1 Number of Domiciled Carriers and Carriers in Operation

Table 3 shows by class the number of carriers domiciled in Newfoundland as well as the number of carriers in operation domiciled out-of-province for the years 1975 to 1978 as defined by Statistics Canada. Class I carriers have revenues of $2 million or more. Class II carriers have revenues from $500 000 to $1 999 999. Class III carriers have revenues from $100 000 to $499 999.

Table 3

NUMBER OF DOMICILED CARRIERS AND CARRIERS IN OPERATION [17]

Year	Domiciled	% Total	In Operation	% Total	Total
		Class I			
1975	-		9		9
1976	-		13		13
1977	3		17		20
1978	3		21		24
		Class II			
1975	5		20		25
1976	7		21		28
1977	-		17		17
1978	3		17		20
		Class III			
1975	34		53		87
1976	34		55		89
1977	43		62		105
1978	61		80		141
		Total All Classes			
1975	39	32%	82	68%	121
1976	41	32%	89	68%	130
1977	46	32%	96	68%	142
1978	67	36%	118	64%	185

There are two conclusions that may be drawn from Table 3; first, the number of carriers in each class has grown considerably from 1975 to 1978. One interpretation that can be taken from this conclusion is that as the threshold of being deemed a Class III carrier by Statistics Canada is the requirement to have annual revenues of $100 000 or more, each year more non-reporting carriers became reporting carriers as their revenues grew in size. Second, the total percent of all classes of carriers domiciled in Newfoundland compared with carriers domiciled out-of-province remained more or less steady at about one out of three during the four year period, despite the substantial growth in both categories.

2.2 Form of Ownership

Table 4 shows the form of ownership for Newfoundland Domiciled Carriers by class for the year 1978.

Table 4

FORM OF OWNERSHIP [17]

	Class I	Class II	Class III	Total
Sole Owner	-	-	16	16
Partnership	-	-	3	3
Incorporated	3	3	41	47
Cooperative	-	-	1	1
TOTAL	3	3	61	67

2.3 Motor Vehicle Registrations

Table 5 shows the total number of motor vehicle registrations - trucks and truck tractors registered in Newfoundland, totals for Atlantic Canada and totals for all of Canada.

Table 5

MOTOR VEHICLE REGISTRATIONS [18]

Year	Newfoundland	All Atlantic Canada	All Canada
1973	28 180	142 824	1 799 042
1974	31 417	158 220	1 980 106
1975	34 650	174 738	2 111 945
1976	39 711	194 384	2 266 383
1977	43 238	217 088	2 442 342
1978	45 362	247 875	2 717 832
Percent Increase 1978 over 1973	60.97%	73.55%	51.07%

Statistics Canada [18] states that the registration figures represent the total number of vehicles which held a registration in the reporting province for all or for any part of the license year. Therefore the figures cover all registrations and not only those for Class I, Class II and Class III carriers defined in the previous table for domiciled and out-of-province carriers. An interesting fact about Table 5 is that the percent increase of 1978 over 1973 for Newfoundland registrations was 60.97% compared with 73.55% for Atlantic Canada and 51.07% for all Canada.

2.4 Origins and Destinations of Traffic for Newfoundland-based Carriers

Statistics Canada [19] reports the result of a survey "to provide reliable estimates concerning the origin and destination of domestic intercity commodity movements by for-hire motor carriers". The survey provides the estimated transport revenues earned on the movement of goods from province or territory of origin to province or territory of destination.

Table 6 has been abstracted from the survey and shows the estimated Canadian motor carrier revenues moving within Newfoundland as well as from Newfoundland to the other three Atlantic Provinces, to Ontario and Québec and to Western Canada for the years 1975 to 1978.

Table 6

MOTOR CARRIER REVENUES - WITHIN NEWFOUNDLAND AND TO OTHER PARTS OF CANADA [19]
(X $1000)

	1978	1977	1976	1975
Originated Revenues				
Intra Revenues	10 843	11 388	6 160	8 026
Revenues from Newfoundland				
To Other Three Atlantic Provinces	2 284	1 680	1 430	804
To Ontario & Québec	1 011	1 817	1 081	1 056
To Western Canada	710	617	559	504
	4 005	4 114	3 070	2 364
TOTAL	14 850	15 503	9 229	10 389
Percent Intra Revenues to Total Originated Revenues	73.0%	73.5%	66.7%	77.3%

Table 7 shows the estimated transport revenues moving from the other three Atlantic Provinces, from Québec, from Ontario and from Western Canada to Newfoundland for the years 1975 to 1978.

Table 7

MOTOR CARRIER REVENUES TO NEWFOUNDLAND [19]
(X $1000)

	1978	1977	1976	1975
Originated Revenues				
Revenues to Newfoundland				
From Other Three Atlantic Provinces	6 815	8 111	6 630	6 580
From Québec	5 886	4 178	4 505	2 298
From Ontario	7 297	5 898	3 643	5 694
From Western Canada	2 584	308	1 209	858
TOTAL	22 582	18 495	15 987	15 430

The following conclusions may be drawn from Tables 6 and 7:

From Table 6, about three quarters of the Canadian revenues earned by carriers operating in Newfoundland and originating in Newfoundland are for intra-Newfoundland movements. (Note: Statistics Canada does not develop revenues for international movements and there are substantial volumes of fish moving to the United States not included in Table 6.)

Table 7 shows that Newfoundland carriers earned $22 582 000 in revenues inbound from Canadian origins and earned only $4 005 000 (Table 6) in revenues outbound to Canadian destinations.

2.5 Relative Profitability of Newfoundland Domiciled Carriers

Tables 8, 9 and 10 develop the operating ratio and the return on total capital employed before interest and taxes for Newfoundland Domiciled Carriers (totals for Classes I, II and III) for the years 1975 to 1978 as issued by Statistics Canada, as well as for the total of Atlantic Provinces Domiciled Carriers and for All Carriers in Canada.

Table 8

RELATIVE PROFITABILITY OF NEWFOUNDLAND DOMICILED CARRIERS [17]
(X $1000)

	1978	1977	1976	1975
Total Operating Revenues	27 209	18 107	14 824	14 004
Total Operating Expenses	26 311	17 231	14 232	13 637
Net Operating Revenue	897	877	592	367
Operating Ratio (Note 1)	96.7%	95.2%	96.0%	97.4%
Bank Loans	1 639	914	907	1 298
Long Term Debt	4 062	3 568	2 286	2 228
Capital Stock	780	452	190	301
Retained Earnings	2 010	1 977	2 684	2 811
Total Capital Employed	8 491	6 911	6 067	6 638
Return on Total Capital Employed before Interest & Taxes (Note 2)	10.56%	12.69%	9.76%	5.53%

Note 1: Operating Ratio is the relationship between total Operating Expenses (before interest and taxes) to total Operating Revenues. The spread between the two is total Operating Profit.

Note 2: The Return on Total Capital Employed before Interest and Taxes is the relationship between total Operating Profit as described in Note 1 and the total of Bank Loans, Long Term Debt, Retained Earnings and Capital Stock.

Table 9

RELATIVE PROFITABILITY OF TOTAL ATLANTIC PROVINCES
DOMICILED CARRIERS [17]
(X $1000)

	1978	1977	1976	1975
Total Operating Revenues	200 300	170 628	148 870	132 342
Total Operating Expenses	188 997	164 819	141 884	126 615
Net Operating Revenue	11 301	5 809	6 986	5 727
Operating Ratio (Note 1)	94.3%	96.6%	95.3%	95.7%
Bank Loans	12 894	9 722	8 421	7 680
Long Term Debt	23 835	19 507	19 507	18 640
Capital Stock	3 457	2 966	2 504	2 779
Retained Earnings	20 002	19 442	21 893	21 794
Total Capital Employed	60 188	51 637	52 325	50 893
Return on Total Capital Employed before Interest & Taxes (Note 2)	18.78%	11.25%	13.35%	11.25%

Note 1: Operating Ratio is the relationship between total Operating Expenses (before interest and taxes) to total Operating Revenues. The spread between the two is total Operating Profit.

Note 2: The Return on Total Capital Employed before Interest and Taxes is the relationship between total Operating Profit described in Note 1 and the total of Bank Loans, Long Term Debt, Retained Earnings and Capital Stock.

Table 10

RELATIVE PROFITABILITY OF ALL CARRIERS IN CANADA [17]
(X $1000)

	1978	1977	1976	1975
Total Operating Revenues	4 020 952	2 863 822	2 572 790	2 296 920
Total Operating Expenses	3 854 949	2 746 863	2 459 201	2 193 465
Net Operating Revenue	166 003	116 959	113 589	103 455
Operating Ratio (Note 1)	93.9%	95.9%	95.6%	95.5%
Bank Loans	166 229	157 004	134 021	121 736
Long Term Debt	565 010	534 121	507 019	444 517
Capital Stock	129 375	115 082	124 924	131 512
Retained Earnings	455 718	389 475	375 140	333 489
Total Capital Employed	1 316 332	1 195 682	1 141 104	1 031 254
Return on Total Capital Employed before Interest & Taxes (Note 2)	12.61%	9.78%	9.95%	10.03%

Note 1: Operating Ratio is the relationship between total Operating Expenses (before interest and taxes) to total Operating Revenues. The spread between the two is total Operating Profit.

Note 2: The Return on Total Capital Employed before Interest and Taxes is the relationship between total Operating Profit as described in Note 1 and the total of Bank Loans, Long Term Debt, Retained Earnings and Capital Stock.

There are several conclusions, outlined in the following paragraphs, which may be drawn from Tables 8, 9 and 10 as follows.

Profitability, as measured either by operating ratio or by return on total capital employed before interest and taxes, varies in different parts of Canada year by year, which indicates that local economic conditions are a factor in relative profitability of motor carrier operations. However, the fluctuations tend to be evened out for All Carriers in Canada in any one year.

Over the four year period, the Newfoundland Domiciled Carriers are less profitable than all domiciled carriers in Atlantic Canada, only in 1977 were the Newfoundland Carriers more profitable.

Over the same four year period, the Newfoundland Domiciled Carriers were also less profitable than All Carriers in Canada, again except for 1977.

Table 11 develops the operating ratio and the return on total capital employed before interest and taxes for Newfoundland Domiciled Carriers for the year 1978 separately for Class I, Class II and Class III carriers.

Table 11

RELATIVE PROFITABILITY OF NEWFOUNDLAND DOMICILED CARRIERS BY CLASS - YEAR 1978 [17]
(X $1000)

	Class I	Class II	Class III
Total Operating Revenues	10 531	2 428	14 249
Total Operating Expenses	10 467	2 271	13 593
Net Operating Revenue	84	157	656
Operating Ratio	99.4%	93.5%	95.4%
Bank Loans	197	223	1 220
Long Term Debt	1 367	407	2 288
Capital Stock	184	21	575
Retained Earnings	452	98	1 461
Total Capital Employed	2 200	749	5 544
Return on Total Capital Employed before Interest & Taxes	3.8%	21.0%	11.8%

Tables 12 and 13 provide the same data by class for the year 1978 for the total of Atlantic Provinces Domiciled Carriers and for All Carriers in Canada.

The following conclusions may be drawn for the year 1978 on the relative profitability of Classes I, II and III Newfoundland Domiciled Carriers as compared with the total for Atlantic Provinces Domiciled Carriers by class and with the total of All Carriers in Canada by class:

In 1978, the Newfoundland Domiciled Class I Carriers had a very poor year when compared with Class II and Class III Newfoundland Domiciled Carriers, as well as when compared with Class I Atlantic Provinces Domiciled Carriers. However, Class I All Carriers in Canada also had a poor year.

Table 12

RELATIVE PROFITABILITY OF TOTAL ATLANTIC PROVINCES DOMICILED CARRIERS BY CLASS - YEAR 1978 [17]

(X $1000)

	Class I	Class II	Class III
Total Operating Revenues	101 419	43 796	55 082
Total Operating Expenses	96 792	40 535	51 690
Net Operating Revenue	4 647	3 261	3 392
Operating Ratio	95.4%	92.6%	93.8%
Bank Loans	6 327	2 590	3 976
Long Term Debt	11 314	5 166	7 356
Capital Stock	839	727	1 890
Retained Earnings	5 297	9 078	5 628
Total Capital Employed	23 777	17 561	18 850
Return on Total Capital Employed before Interest & Taxes	19.5%	18.6%	18.0%

Table 13

RELATIVE PROFITABILITY OF ALL CARRIERS IN CANADA BY CLASS - YEAR 1978 [17]

(X $1000)

	Class I	Class II	Class III
Total Operating Revenues	2 601 655	742 346	676 951
Total Operating Expenses	2 519 782	706 037	629 130
Net Operating Revenue	81 873	36 308	47 821
Operating Ratio	96.8%	95.1%	92.9%
Bank Loans	108 242	48 734	46 001
Long Term Debt	492 259	108 101	114 247
Capital Stock	117 660	17 175	25 721
Retained Earnings	316 633	119 827	85 565
Total Capital Employed	1 034 794	293 837	271 534
Return on Total Capital Employed before Interest & Taxes	7.9%	12.4%	17.6%

In 1978, the Newfoundland Domiciled Class II Carriers had a relatively profitable year having a return on total capital employed before interest and taxes of 20.96%, compared with 18.57% for all Atlantic Provinces Domiciled Carriers, and 12.36% for All Carriers in Canada.

In 1978, the Newfoundland Domiciled Class III Carriers had a relatively poor year, earning 11.83% return on total capital employed compared with 17.99% for all Atlantic Provinces Domiciled Carriers and 17.61% for All Carriers in Canada.

The year 1977 has also been analyzed similarly to develop relative profitability under a different year of economic conditions.

Table 14 shows for 1977 the operating ratio and the return on total capital employed before interest and taxes for Newfoundland Domiciled Carriers separately for Class I, Class II and Class III carriers. Tables 15 and 16 show comparable data for the total of Atlantic Provinces Domiciled Carriers and for All Carriers in Canada:

Table 14

RELATIVE PROFITABILITY OF NEWFOUNDLAND DOMICILED CARRIERS
BY CLASS - YEAR 1977 [17]
(X $1000)

	Class I	Class II*	Class III
Total Operating Revenues	9 282	2 442	8 825
Total Operating Expenses	8 862	2 252	8 368
Net Operating Revenue	420	190	457
Operating Ratio	95.5%	92.2%	94.8%
Bank Loans	271	289	642
Long Term Debt	1 678	394	1 889
Capital Stock	62	25	390
Retained Earnings	456	116	1 520
Total Capital Employed	2 467	824	4 441
Return on Total Capital Employed before Interest & Taxes	17.0%	23.1%	10.3%

* Includes Prince Edward Island for purposes of confidentiality by Statistics Canada.

Table 15

RELATIVE PROFITABILITY OF TOTAL ATLANTIC PROVINCES DOMICILED CARRIERS BY CLASS - YEAR 1977 [17]
(X $1000)

	Class I	Class II	Class III
Total Operating Revenues	85 474	40 448	44 705
Total Operating Expenses	85 030	37 785	42 000
Net Operating Revenue	444	2 663	2 705
Operating Ratio	99.5%	93.4%	93.9%
Bank Loans	5 170	1 730	2 882
Long Term Debt	8 702	4 936	5 869
Capital Stock	705	405	1 854
Retained Earnings	6 016	8 035	5 391
Total Capital Employed	20 593	15 106	15 936
Return on Total Capital Employed before Interest & Taxes	2.2%	17.6%	17.0%

Table 16

RELATIVE PROFITABILITY OF ALL CARRIERS IN CANADA BY CLASS - YEAR 1977 [17]
(X $1000)

	Class I	Class II	Class III
Total Operating Revenues	2 059 874	683 678	526 593
Total Operating Expenses	1 985 081	653 123	495 266
Net Operating Revenue	74 793	30 555	31 327
Operating Ratio	96.4%	95.5%	94.1%
Bank Loans	88 188	41 516	36 525
Long Term Debt	383 759	92 911	88 339
Capital Stock	93 523	16 493	20 358
Retained Earnings	270 419	110 694	74 604
Total Capital Employed	835 889	261 614	219 826
Return on Total Capital Employed before Interest & Taxes	8.9%	11.7%	14.3%

The following conclusions may be drawn from Tables 14, 15 and 16 in respect of the relative profitability of Classes 1, II and III for the year 1977 for Newfoundland Domiciled Carriers as compared with the total for Atlantic Provinces Domiciled Carriers by class and with the total of All Carriers in Canada by class:

In 1977, the Newfoundland Domiciled Class I Carriers had a relatively good year's earnings by producing a return on total capital employed before interest and taxes of 17.0%, compared with 2.2% for the total of Atlantic Provinces Domiciled Carriers and 8.9% for the total of All Carriers in Canada.

In 1977, the Newfoundland Domiciled Class II Carriers had a high profit year by producing a return on total capital employed before interest and taxes of 23.1%, compared with 17.6% for the total of Atlantic Provinces Domiciled Carriers and 11.7% for the total of All Carriers in Canada.

In 1977, the Newfoundland Domiciled Class III Carriers had a relatively poor year by producing a return on total capital employed before interest and taxes of 10.3%, compared with 17.0% for the total of Atlantic Provinces Domiciled Carriers and 14.3% for the total of All Carriers in Canada.

When comparing relative profitability for both the years 1978 and 1977 by class, there is considerable fluctuation in the profit results, thus indicating that caution should be used in interpreting the results without resorting to longer term observations.

2.6 Relative Profitability by Type of Traffic Handled

Statistics Canada develops annually [17] an analysis of profitability by type of carrier operation. As many carriers conduct more than one type of operation, such carriers are included in the statistics more than once. Nevertheless the data produced does give some insight into relative profitability by type of traffic handled.

Table 17 shows the profitability data by type of operation for Newfoundland Domiciled Carriers for the year 1978.

As can be noted from Table 17, the specialized carriers tend to have more favourable operating ratios than the general package carrier types.

Table 18 shows the comparative operating ratios and ranking by type of operation for Newfoundland Domiciled Carriers, for all Atlantic Provinces Domiciled Carriers and for All Carriers in Canada for the year 1978.

When noting the operating ratio ranking for the three different areas, the general tendency is still for the more specialized carriers to have more favourable operating ratios but there are several minor exceptions.

Table 17

PROFITABILITY BY TYPE OF OPERATION - NEWFOUNDLAND DOMICILED CARRIERS - YEAR 1978 [17]

Type of Operation	Number of Carriers	Total Operating Revenues ($)	Total Operating Expenses ($)	Net Operating Revenue ($)	Operating Ratio (%)
General Freight	43	20 839	20 334	505	97.6
Common	42	20 485	19 987	498	97.6
Intercity	44	23 087	22 444	643	97.2
International	3	2 381	2 275	106	95.5
Other Categories	9	2 355	2 239	116	95.1
Interprovincial	8	3 990	3 779	211	94.7
Contract	22	4 295	4 053	242	94.4
Local & Off Highway	23	4 121	3 867	254	93.8
Forest Products	-	-	-	-	-
Dump & Bulk Liquid	12	1 587	1 468	119	92.5

Table 18

COMPARATIVE PROFITABILITY BY TYPE OF OPERATION WITH OTHER CARRIERS IN CANADA - YEAR 1978 [17]

	Operating Ratio					
Type of Operation	Domiciled Newfoundland		Domiciled Total Atlantic Canada		All Canada	
	Ratio (%)	Rank	Ratio (%)	Rank	Ratio (%)	Rank
General Freight	97.6	9	95.6	8	96.8	9
Common	97.6	8	95.2	7	96.3	7
Intercity	97.2	7	94.4	6	96.0	6
International	95.5	6	96.1	9	94.2	3
Other Categories	95.1	5	91.4	1	95.1	5
Interprovincial	94.7	4	94.4	5	96.7	8
Contract	94.4	3	91.8	2	94.2	2
Local & Off Highway	93.8	2	94.1	4	95.1	4
Forest Products	-	-	-	-	-	-
Dump & Bulk Liquid	92.5	1	92.2	3	92.7	1
Total of All Classes	96.7		94.3		93.9	

2.7 Debt-Equity Ratios

Tables 8, 9 and 10 in Section 2.5 show the relative profitability of Newfoundland Domiciled Carriers, the operating ratios, the return on total capital employed for Newfoundland Domiciled Carriers, total Atlantic Provinces Domiciled Carriers and All Carriers in Canada for the years 1975 to 1978. For purposes of developing debt-equity ratios, debt has been abstracted from these tables as the total of bank loans and long term debt, and equity as the total of capital stock and retained earnings.

Table 19 shows the debt-equity ratios for Newfoundland Domiciled Carriers, total Atlantic Provinces Domiciled Carriers, and All Carriers in Canada for the years 1975 to 1978.

Table 19

DEBT-EQUITY RATIOS

Newfoundland Domiciled Carriers

	1978	1977	1976	1975
Debt (X $1000)	5 701	4 482	3 193	3 526
Equity (X $1000)	2 790	2 429	2 874	3 112
	8 491	6 911	6 067	6 638
Ratios - Debt	67%	65%	53%	53%
- Equity	33%	35%	47%	47%

Total Atlantic Provinces Domiciled Carriers

	1978	1977	1976	1975
Debt (X $1000)	36 729	29 229	27 928	26 320
Equity ($1000)	23 459	22 408	24 397	24 573
	60 188	51 637	52 325	50 893
Ratios - Debt	61%	57%	53%	52%
- Equity	39%	43%	47%	48%

All Carriers in Canada

	1978	1977	1976	1975
Debt (X $1000)	731 239	691 125	641 040	566 253
Equity (X $1000)	585 093	504 557	500 064	465 001
	1 316 332	1 195 682	1 141 104	1 031 254
Ratios - Debt	56%	58%	56%	55%
- Equity	44%	42%	44%	45%

The following conclusions may be drawn from Table 19:

The Newfoundland Domiciled Carriers show a steadily deteriorating debt-equity ratio during the four year period.

The total of Atlantic Provinces Domiciled Carriers also shows a deteriorating debt-equity ratio but not as severe as for the Newfoundland Domiciled Carriers. When the Newfoundland data is taken away from the total of the Atlantic Provinces Carriers data, the debt-equity ratio, for example, for 1978 becomes 60 - 40, still deteriorating but less so than for Newfoundland Domiciled Carriers.

The debt-equity ratio for All Carriers in Canada is relatively stable during the four year period.

However, there is one observation that needs to be made in respect of the equity data for Newfoundland Carriers. The equity data for the Newfoundland Domiciled Carriers is less in absolute terms in 1978 than in 1975 which is brought about by a reduction in retained earnings to a minor extent in 1976 and to a greater extent in 1977. During this same period long term debt substantially increased (Table 8).

2.8 Proportion of Traffic Handled in Newfoundland by Large Carriers

It is not possible to develop from Statistics Canada data the extent to which large carriers dominate the motor carrier industry in Newfoundland, simply because they measure carriers earning annual revenues of $100 000 and up. Nevertheless there are some facts that can assist in a judgement appraisal of the influence of large carriers.

Table 20

REVENUES BY CLASS OF CARRIER - YEAR 1978 [17]

Carriers	Newfoundland Domiciled		Total Atlantic Provinces Domiciled		Total All Canada	
	Revenues	%	Revenues	%	Revenues	%
(X $1000)						
Class I	10 531	38.7	101 419	50.6	2 601 655	64.7
Class II	2 428	8.9	43 796	21.9	742 346	18.5
Class III	14 249	52.4	55 082	27.5	676 951	16.8
	27 208	100.0	200 297	100.0	4 020 952	100.0

The conclusion that may be drawn from Table 20 is that carriers domiciled in Newfoundland are smaller in size than elsewhere in Canada, in that Class III carriers handled 52.4% of the revenues in 1978, compared with 27.5% for the total of Atlantic Provinces Domiciled Carriers and 16.8% for All Carriers in Canada.

Statistics Canada has developed data [17] for 100 of the motor carriers which in 1975 reported the highest gross operating revenues in the industry. Due to mergers that 100 has now become 96. This group represented only 3.3% of the establishments whose gross operating revenue was $100 000 or more, but accounted for 44.4% of the gross operating revenue for this portion of the industry.

Table 21 shows the proportion of revenues that the 100 selected largest carriers in Canada handle within and from Newfoundland compared with all classes of carriers operating in Newfoundland for the year 1977 based on their responses to the For-Hire Trucking Survey.

Table 21

COMPARISON OF REVENUES SELECTED LARGEST VERSUS ALL CARRIERS
WITHIN AND FROM NEWFOUNDLAND - YEAR 1977 [17]

Carriers	Within Newfoundland	From Newfoundland to Other Three Atlantic Provinces	From Newfoundland to Ontario & Québec
Selected Largest	$ 1 941 000	$ 685 000	$ 68 000
All Carriers (000)	$ 11 388 000	$ 1 680 000	$ 1 817 000
Percent	17.0%	40.8%	3.7%

Table 22 shows the same comparison for all carriers operating in Atlantic Canada.

Table 22

COMPARISON OF REVENUES SELECTED LARGEST VERSUS ALL CARRIERS
WITHIN AND FROM ATLANTIC CANADA - YEAR 1977 [17]

Carriers	Within Atlantic Canada	From Atlantic Canada to Ontario & Québec
Selected Largest	$ 13 018 000	$ 14 501 000
All Carriers	$ 68 088 000	$ 26 736 000
Percent	19.1%	54.2%

Table 23 shows the proportion of revenues that the 100 selected largest carriers in Canada handled to Newfoundland for the year 1977 compared with all classes of carriers, as developed by Statistics Canada in publication no. 53-222.

Table 23

COMPARISON OF REVENUES SELECTED LARGEST VERSUS ALL CARRIERS TO NEWFOUNDLAND - YEAR 1977 [17]

	From Other Three Atlantic Provinces	From Québec	From Ontario	From Western Canada
Selected Largest	$ 6 703 000	$ 833 000	$ 3 282 000	$ 87 000
All Carriers	$ 7 547 000	$ 4 178 000	$ 5 898 000	$ 308 000
Percent	88.8%	19.9%	55.6%	28.2%

The following conclusions may be drawn from Tables 21, 22 and 23:

The 100 selected largest carriers in Canada are only a small factor in intra-Newfoundland movements, namely 17.0%. This conclusion is in line with the fact that Class III Domiciled Carriers produce 52.4% of the total of Class I, II and III revenues for domiciled carriers in Newfoundland.

The 100 selected largest carriers in Canada play a considerably more prominent role in the handling of traffic between Newfoundland and Atlantic Canada, namely, 40.8% from Newfoundland and 88.8% to Newfoundland. (As stated earlier, Statistics Canada does not include international traffic in its data. It may be presumed that some of the difference between 40.8 % from and 88.8% to Newfoundland may be accounted for in the handling of fish from Newfoundland. If this presumption is valid, the 100 selected largest carriers in Canada would play an even larger role than the published figures indicate in the handling of traffic between Newfoundland and Atlantic Canada.)

The 100 selected largest carriers in Canada do not play as large a role in the handling of traffic between Newfoundland and Central Canada as the selected 100 carriers do between Newfoundland and Atlantic Canada.

2.9 Changing Proportions of Interprovincial Ferry Traffic by Type of Carrier between the Year 1968 and the Year 1979

The Sullivan Commission report indicated that interprovincial motor carrier traffic had grown substantially over the past ten years or so, especially in comparison with railway traffic. [4]

A report issued by the Economic Council of Canada in 1980 entitled "Newfoundland: From Dependency to Self Reliance" developed more current data to indicate the growth of the interprovincial motor carrier industry vis-à-vis the railways, as shown in Table 24.

Table 24

GENERAL FREIGHT TRAFFIC TO NEWFOUNDLAND - SELECTED YEARS 1968 - 1979 [20]

Year	Ferry Traffic		Direct Shipping	Total
	Rail (%)	Truck (%)	(%)	(Tonnes)
1968	66.6	4.1	29.3	614
1971	60.6	7.0	32.4	685
1975	52.5	19.9	27.6	908
1976	44.7	27.8	27.5	856
1977	38.5	31.1	30.4	875
1978	31.4	33.6	34.9	904
1979	28.5	30.9	40.6	956

The table reveals the tremendous increase that has taken place since 1968 in the movement of truck traffic to Newfoundland by ferry - coinciding with a relative decrease in rail traffic.

Chapter 3

ECONOMIC REGULATION OF THE MOTOR CARRIER INDUSTRY IN NEWFOUNDLAND

The motor carrier industry is currently regulated in Newfoundland under the Motor Carrier Act in Chapter 242 of the Revised Statutes of Newfoundland 1970, with revisions in 1974 and 1977. Under and by virtue of the powers conferred by Section 27 of the Motor Carrier Act, the Board of Commissioners of Public Utilities issued Regulations on September 24, 1976, which are the ones currently in effect. Prior to the passage of this Act, motor carriers were regulated under the Motor Carrier Act, Chapter 95 of the Revised Statutes of Newfoundland, 1952.

There are few federal laws aimed at economic control of the trucking industry, primarily because of the federal policy to leave the administration to provincial agencies. The Motor Vehicle Transport Act (MVTA), passed in 1954, formalized this policy by authorizing provincial transport boards to license extraprovincial motor vehicle enterprises and to regulate their rates. The MVTA also adopts provincial legislation and regulations for this purpose.

Passage of the National Transportation Act (NTA) provided for federal administration of extraprovincial motor vehicle undertakings in Part III. Although Part III was proclaimed in May 1970, it has not been generally implemented.

In Newfoundland, administration of the Motor Carrier Act, as well as the Motor Vehicle Transport Act by delegation, is conducted by the Board of Commissioners of Public Utilities. The Board consists of a Chairman, a Vice-Chairman, and currently two Commissioners. The Board reports to the Minister of Justice in conducting its responsibilities.

The Motor Carrier Act does not apply to the following vehicles as per Section 3 of the Act:

(c) a vehicle while being used exclusively in the transportation of

  (i) trees, logs, pulpwood, pit props, or similar forest products, or

  (ii) mineral ore from the mine to a processing plant or to the first point of transhipment;

(d) a vehicle which is used exclusively by or for

  (i) a farmer for the transportation of unprocessed products of the farm, or

(ii) a fisherman for the transportation of unprocessed products of the sea from the place of production or landing to the market or to the first point of transhipment.

In addition, the Act does not apply to geniune private carriage as per Section 3 (e) of the Act as follows:

(e) A vehicle which is used exclusively for the transportation of goods and chattels bona fide the property of the person in whose name the vehicle is registered under the Highway Traffic Act.

Section 4 of the Act requires that a motor vehicle or trailer cannot be operated on any highway as a public service vehicle unless a Certificate of Public Convenience and Necessity has been issued by the Board.

Comment: RE: Section 4: The following data describes the level of activity of the Motor Carrier Division of the Board for the year 1979.

Table 25

ACTIVITIES OF MOTOR CARRIER DIVISION - YEAR 1979 [22]

Active Motor Carriers at beginning of year	1 905
Certificates/licenses issued during year	331
Certificates/licenses cancelled during year	232
Active Motor Carriers at end of year	2 166

A total of 1 543 applications for amendment were received in addition to applications for new certificates/licenses. The Board also received 60 applications for sale, assignment or transfer of certificates/licenses.

Section 5 of the Act states the matters to be considered by the Board on considering an application for a certificate as follows:

(a) any objection to the application by any person already providing transport facilities, whether by highway, water, air or rail, on the routes or between the places which the applicant intends to serve on the ground that suitable facilities are, or, if the certificate were issued, would be in excess of requirements for the area;

(b) the general effect on other transport services and any public interest which may be affected by the issuance of the certificate;

(c) the quality and permanence of the service to be offered by the applicant and the fitness, willingness and ability of the applicant to provide proper service; and

(d) any other matter that in the opinion of the Board is relevant or material to the application.

Comment: RE: Section 5: The intent of this section of the Act is what is commonly called the Test of "public convenience and necessity". Each case is judged on its own merits and is a very important section as in all motor carrier acts in Canada. Fundamentally, substantial judgement is required and is used by the Board in this section of the Act. The terms of the certificate received by a carrier as a result of an application for authority are almost always dependent upon two factors: what terms the carrier has requested in his application, and the extent of the complaints by the carriers in opposition to the application.

Section 6 of the Act states that after notice of an application has been published in two consecutive issues of the Newfoundland Gazette, the Board may or may not hold a public hearing depending upon whether objections have been filed.

Comment: RE: Section 6: Whenever objections are filed, a public hearing is held.

Section 7 of the Act states that a certificate shall not be sold, assigned or transferred without the approval of the Board.

Comment: RE: Section 7: The Act does not presently cover the need for approval when shares of a company, which holds a certificate, are sold. This is considered to be a potential problem area which permits local companies to be purchased by out-of-province carriers.

Section 11 of the Act states that the Board may amend, suspend or cancel a certificate, in whole or in part, with or without a public hearing.

Comment: RE: Section 11: The Board actively polices dormant certificates to eliminate inactive certificates. In 1979, 232 certificates were cancelled. [22]

Section 13 of the Act provides that the Board may inquire into and investigate whether any person has operated any public service vehicle in violation of the Act or the regulations.

Comment: RE: Section 13: The Motor Carrier Inspection Division vigorously conducts its responsibilities as may be noted from extracts of their annual statistical report statement for 1979 as follows:

Table 26

EXTRACTS FROM MOTOR CARRIER INSPECTION DIVISION REPORT - YEAR 1979 [22]

Number of Inspections	3 746
Number of Violations	494
Number of Convictions	386
Number of Fines Paid	357
Number of Investigations	54

Internal records of the Board indicate that the average fine paid in September 1980, was $43.51. In the light of today's inflationary conditions, there is real reason to believe that the level of fines should be substantially higher in order to place greater penalty on carriers operating in an illegal manner.

Section 14 of the Act provides the Board with the power to investigate any rate or charge that is uneconomic, unreasonable or unjustly discriminatory. Under Section 19 the Board may fix or approve the schedule of rates, the minimum or maximum rates, and may at any time revise those rates and charges.

Comment: RE: Section 14 and Section 19: Newfoundland is the only province in the Atlantic Region that fixes or approves rates. It appears that the Board is effective in its responsibilities in this regard. Their procedures are substantially aided by the requirements of the Atlantic Provinces Freight Assistance Act which requires that subsidy payments to carriers can only be made on Newfoundland movements when the tariff is approved by the Public Utilities Board.

Section 20 provides that a holder of a certificate shall not abandon or discontinue any service provided for in his certificate without an order of the Board.

Comment: RE: Section 20: The Board is active in seeking out dormant certificates. In 1979, 232 certificates were cancelled. [22]

Section 25 of the Act states that the Board may specify the route or routes over which a public service vehicle may operate and specify the highway or highways within an area or zone on which the vehicle may operate.

Section 26 of the Act states that the Board may fix the schedules and services that shall be observed and provided by the motor carrier.

Comment: RE: Section 25 and Section 26: The Sullivan Report pointed out that 90% of all trucking firms serving Newfoundland provided irregular or unscheduled service to communities. [2] The Sullivan Commission also recommended [23] that scheduled deliveries become a condition for the granting of licenses, particularly for intraprovincial services.

The May 1974 amendment to the Act provided a new section (4A) stating that no motor carrier services can be offered under guise of lease agreement, as follows:

> 4A No person shall enter into a lease of a motor vehicle or trailer where:
>
> (a) the lessor of the motor vehicle or trailer engages or pays directly or indirectly the driver of the motor vehicle or trailer;
>
> (b) the lessor in any manner whatsoever exercises any control over the driver in the course of his employment as a driver of the motor vehicle or trailer;
>
> (c) the lessor of the motor vehicle or trailer in any manner whatsoever assumes any responsibility for any goods transported by the motor vehicle or trailer; or
>
> (d) the lessee of the vehicle does not acquire or exercise absolute possession of and control over the operation of the motor vehicle or trailer under the lease.

Comment: RE: New Section 4A: It is understood that the purpose of this section is to assist the enforcement activities of the Motor Carrier Inspection Division in its quest to minimize pseudo-leasing activities by private carriers, which have become such a problem as well in other regulatory jurisdictions. [24]

The Board of Commissioners of Public Utilities issued Motor Carrier Regulations in 1976, which provide at the outset various definitions practised by the Board. The Regulations also provide for a number of administrative procedures, the essential elements of which are as follows:

(a) Fee structure - a maximum of $15 for a truck and between $100 and $135 for a truck tractor;

(b) Procedures to follow for Application for a Certificate and for approval of Sale, Assignment, Transfer, Lease, Consolidation or Merger of Certificates;

(c) Description of various services when authorized by the Board;

(d) Description of Certificates and Identification to be used by motor carriers operating a public service;

(e) Possession of vehicle permit;

(f) Rules RE: interchange of freight vehicles when authorized by the Board;

(g) Rules RE: Casual Leasing of Vehicles;

(h) Rules RE: Amendment of Certificates;

(i) Description of Freight and Express Carriage Conditions and Documents, including prescribed conditions of Carriage and Contract Terms and Conditions;

(j) Returns, Reports and other data required by the Board;

(k) Temporary Operations for a period not to exceed 30 days or a single trip service; and

(l) A list of general regulations of the Board;

3.1 Comparison of Economic Regulations with Other Atlantic Provinces' Regulations and with Neighbouring Jurisdictions

There are a number of factors that are different to some extent in the Motor Carrier Act and Regulations of the Newfoundland Board as compared with the respective Motor Carrier acts of the other Atlantic Provinces and with neighbouring jurisdictions, as follows:

(a) Exempt Commodities - There are minor differences in the commodities and equipment exempt under the respective Motor Carrier acts. For example, the Newfoundland Act regulates the dump truck industry whereas it is exempt under the Nova Scotia Act. (The United States has a much larger list of exempt commodities including fish and many fruits and vegetables hauled in substantial volumes between Newfoundland and the United States.)

(b) Entry Requirements - Apart from relatively minor administrative differences, entry requirements are generally about the same in each of the Atlantic Provinces. Each province, however, uses different terms to describe services granted in a certificate.

(c) Freight Charges - Newfoundland is the only province in Atlantic Canada that may fix or approve freight charges. New Brunswick and Prince Edward Island have the authority to approve rates, but in fact accept rates as filed by the motor carriers. The Nova Scotia Board has the authority only to accept the filing of rates by the motor carriers which are deemed to be the legal rates.

(d) Bond and Certificates of Insurance - In Newfoundland, the consumer is protected by the insurance requirements under the Highway Traffic Act. The other three Atlantic Provinces have specific bond and insurance requirements in their respective Motor Carrier acts.

(e) Uniform Bill of Lading - Recently a uniform bill of lading has been agreed upon by all provinces in Canada and is in the process of implementation by each province.

(f) Owner-operator (Broker) Lease Arrangments - In all four Atlantic Provinces, no mention is made in the respective Motor Carrier acts for the method that owner-cperators (brokers) lease themselves to carriers. In practise, an owner-operator (broker) sells his equipment beneficially to the carrier and the carrier registers the equipment in the carrier's name. In Québec, in the United States and for a few owner-operators in Ontario, lease arrangements with carriers are prescribed by the respective Boards. The balance of the owner-operators in Ontario follow the same beneficial lease arrangements in use in Atlantic Canada.

(g) Private Carriage - In all four Atlantic Provinces, genuine private carriage is excluded from the respective Motor Carrier acts. However, Newfoundland is the only Atlantic Province that attempts to define pseudo-lease arrangements by private shippers. Section 4A of the Act (as described earlier) states that no motor carrier services can be offered under guise of a lease agreement and then sets forth terms and conditions for lease arrangements.

(h) Temporary Operations - Each of the Atlantic Provinces provides for temporary service for a period not to exceed thirty days or a single trip service. The fee is $20 per trip.

(i) Freight Forwarders and Truck Transportation Brokers - None of the Atlantic Provinces regulates the operations of freight forwarders or truck transportation brokers. Québec and Ontario regulate freight forwarders. The United States regulates both freight forwarders and truck transportation brokers.

(j) Offences and Penalties - While each province provides for offences and penalties, the terms vary in each province.

3.2 Estimated Costs of Regulatory Process - Newfoundland

In appraising the value of the regulatory process, one factor is a determination of the estimated costs of the process. Such data is difficult to obtain. However, the Economic Council of Canada released in August 1980 Working Paper No. 3 in Studies of Trucking Regulation: Vol. II. In this Working Paper Norman C. Bonser developed the impact of regulation on For-hire Carriers - an analysis of the cost borne by carriers in the production of regulatory decisions.

In the report [25], Bonsor stated that "with respect to the costs entailed in applying for operating authorities in Newfoundland, the reported figures vary greatly - from a low of $500 per application to a high of $7 000 - from carrier to carrier." He also found that the number of oppositions to applications for operating authorities varied greatly from carrier to carrier. He stated that one large carrier reported that he opposed 20 to 30 applications per year at a cost of $150 to $300 per intervention. Bonsor concluded that "our best estimate of the costs of regulation falling on carriers is $188 000, with lower and upper bounds of $94 000 and $282 000."

The 1979 Annual Report of the Board of Commissioners of Public Utilities showed [22] that $395 400 was paid for Certificates by Motor Carriers and there was an additional amount of $16 789 paid in fines. At the end of 1979, there were 2 166 active motor carriers. [22]

Chapter 4

GENERAL PROVINCIAL REGULATIONS AFFECTING THE MOTOR CARRIER INDUSTRY IN NEWFOUNDLAND

There are a number of general provincial regulations which set forth terms and conditions for the operation of all motor vehicles in Newfoundland.

4.1 Highway Traffic Act

The Highway Traffic Act and Regulations (Chapter 152 of the Revised Statutes of Newfoundland 1970) and amendments are administered by the Registrar of Motor Vehicles. The Act covers the following parts:

Administration of the Act
Registration and Licensing of Vehicles
Licensing of Drivers
Safety Responsibility
Rules of the Road
Traffic Signs and Directions
Regulations
Legal Proceedings, Miscellaneous Offences and Penalties
Application and Repeal

4.1.1 Vehicle Size and Weights

The Highway Traffic Act of Newfoundland prescribes the maximum size of vehicles that may be operated on the highways of Newfoundland as follows:

Table 27

MAXIMUM PERMISSIBLE SIZE OF VEHICLES - NEWFOUNDLAND [26]

Length - Single Vehicle	12 m	(39 ft.)
Length - Overall Combination	20 m	(65 ft.)
Width	2.6 m	(8½ ft.)
Height	4.1 m	(13½ ft.)

Table 28 shows the maximum size of vehicles in the other three Atlantic Provinces.

Table 28

MAXIMUM PERMISSIBLE SIZE OF VEHICLES - MARITIME PROVINCES [26]

	New Brunswick (feet)	Nova Scotia (feet)	Prince Edward Island (feet)
Length - Single Vehicle			
2 Axle	35	-	-
3 Axle	40	40	40
Length - Overall Combination	65	65	65
Width	8½	8½	8½
Height	13½	13½	14½

In general terms, the vehicle sizes permitted in each of the Atlantic Provinces are the same.

The Highway Traffic Act of Newfoundland prescribes the weights that may be operated on the highways of Newfoundland. Newfoundland allows a tolerance of 450 kilograms per axle (about 1 000 lbs.) The other three Atlantic Provinces allow a general tolerance of 1 000 lbs. per axle with certain exceptions for certain highways.

Table 29 provides the gross vehicle weights permitted for representative pieces of equipment. All weights shown are maximum gross weights permitted and are dependent upon proper axle spacing, tire size, vehicle configuration and registration. These maximum weights are usually restricted to designated highways in each respective province. The maximum gross weights for vehicle configurations shown have been calculated using a steering axle weight of 10 000 lbs. or 4 500 kg. All provinces allow greater weights on the steering axle dependent upon tire size and equipment specifications. The Newfoundland weights permitted are shown in kilograms with pounds shown in brackets underneath at 1 000 lbs. equals 450 kg.

Table 29 shows that, for all practical purposes, there is uniformity within Atlantic Canada in gross vehicle weights permitted on the highways. The only exception is for the pup trailer combination. Such combinations are not attractive for use in Newfoundland because of the small increment in permissible weights over a tri-axle trailer combination. Tri-axle trailers have lower total costs of operation.

4.1.2 Canadian Agreement on Vehicle Registrations

At the present time, each of the Atlantic Provinces grants full reciprocity to vehicle registrations in other Atlantic Provinces, with some minor exception related to leased vehicles, provided that the vehicle is not used in intraprovincial operations.

Table 29

GROSS VEHICLE WEIGHTS PERMITTED IN ATLANTIC CANADA [26]

Type of Equipment	Newfoundland (lbs. (kg))	New Brunswick (lbs.)	Nova Scotia (lbs.)	Prince Edward Island (lbs.)
Single Axle Truck	29 736 (13 500)	30 000	30 000	30 000
Tandem Axle Truck	47 777 (21 500)	47 500	47 500	47 500
Single Rear Axle Tractor & Single Axle Trailer	50 000 (22 500)	50 000	50 000	50 000
Tandem Axle Tractor & Tandem Axle Trailer	87 777 (39 500)	87 500	87 500	87 500
Tandem Axle Tractor & Tri-Axle Trailer	107 777 (48 500)	107 500	107 500	107 500
Tandem Axle Tractor & Two Pup Trailers with Total of four axles	115 555 (52 000)	125 000	110 000	110 000

The Canadian Conference of Motor Transport Administrators (CCMTA) developed a prorationing registration agreement which has been entitled the Canadian Agreement on Vehicle Registrations (CAVR). This agreement was adopted at a meeting of the provincial ministers responsible for Road Transportation and Safety at their conference held in Toronto on October 2, 1980. Prince Edward Island, the Yukon and the Northwest Territories abstained from signing the agreement.

Under the agreement, to be effective in six provinces (New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia) by April 1981, and in Québec, Nova Scotia and Newfoundland by April 1982, truck owners will license their vehicles in their home provinces, paying a prorated portion of the full applicable provincial license fee according to estimates of mileage to be travelled in that province. The object is to free up the movement of goods.

4.1.3 Insurance and Safety

Table 30 shows the current minimum cargo insurance requirements for all motor carriers in Newfoundland.

Table 30

MINIMUM CARGO INSURANCE REQUIREMENTS [29]

Maximum Gross Weight	
up to 5 000 lbs.	$ 1 000
5 001 - 15 000 lbs.	3 000
15 001 - 30 000 lbs.	6 000
30 001 - 40 000 lbs.	8 000
40 001 - 50 000 lbs.	10 000
over 50 000 lbs.	12 000

The Highway Traffic Act sets forth financial responsibility requirements to provide for liabilities that may be incurred resulting from bodily injury or death of any person or damage to property occasioned by or arising out of the ownership, maintenance, operation or use of a motor vehicle.

In the other three Atlantic Provinces, the insurance and bonding requirements are set forth in the respective Motor Carrier acts of each province.

The Uniform Bill of Lading, developed by all provinces in Canada, was approved by the province of Newfoundland in November 1980. This new Bill of Lading for regulated carriers sets the maximum liability of the carrier at $2.00 per pound, unless a higher value is declared by the consignor.

4.2 Newfoundland Retail Sales Tax Act

The province of Newfoundland has been a participant since April 1, 1979 in the Interprovincial Sales Tax Arrangement. The Arrangement is governed by the Newfoundland Retail Sales Tax Act.

The Interprovincial Sales Tax Arrangement applies to the provinces of Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick, Québec, Ontario, Manitoba and Saskatchewan.

The objective of this interprovincial arrangement is to relieve common carriers as much as possible from the application of sales tax more than once where vehicles are operated under authorities in more than one province. Because tax must be paid to each province levying tax in which the carrier operates, a system has been devised whereby tax can be paid on a pro-rate basis to the provinces, calculated on a mileage formula. By following the details of the arrangement, eligible carriers can substantially lessen the impact, or possible impact, of sales taxes across the provinces with a minimum investment of time and effort.

4.3 Gasoline Tax Act

Unlike the other three Maritime provinces, Newfoundland is not involved in the Maritime provinces Reciprocal Gasoline Tax Agreement. Instead, in respect of the motor carrier industry in Newfoundland, the province of Newfoundland has its own Gasoline Tax Act, 1978 and Gasoline Tax Regulations 1980.

The province of Newfoundland requires motor carrier operators travelling in Newfoundland to purchase fuel for miles (kilometers) travelled. There is an inspector stationed at Port aux Basques Newfoundland, to gauge fuel tanks on entry to, and exit from the province. Any motor carrier operator who consumes more fuel than was purchased in the province is required to pay tax on the fuel that was consumed, but purchased outside Newfoundland. This system does not require registration of truckers, trip and mileage reports, audits, etc.

4.4 Labour Standards

Motor carrier operators in Newfoundland in interprovincial trade and in international trade come under Canadian legislation in respect of labour standards. Motor carrier operators in Newfoundland in intraprovincial trade and private carriers hauling their own goods, come under Newfoundland legislation in respect of labour standards.

The following is a list of Canadian legislation concerning labour standards applicable to extraprovincial and international carriers:

- Part III of the Canada Labour Code deals with standard hours, wages, vacations and holidays.

- Canada Labour Standards Regulations provide regulations respecting hours of work, wages, annual vacations, general holidays, maternity leave, group and individual termination of employment and severance pay in federal works, undertakings and businesses.

- Motor Vehicle Operators Hours of Work Regulations which provide regulations respecting hours of work standards for employees engaged in the transport of goods, passengers, and mail by motor vehicle.
- Part IV of the Canada Labour Code deals with Safety of Employees as set out in the Canada Motor Vehicle Operators Hours of Service Regulations, respecting the hours of service for motor vehicle operators engaged in interprovincial trade or the transportation of mail and the filing of returns by motor carriers as specified in the resolutions.

The following is a list of Newfoundland legislation concerning labour standards applicable to intraprovincial motor carriers and to private carriers hauling their own goods:

- The Labour Standards Act (An Act to provide uniform minimum standards of condition of employment in the province)

- Labour Standards Regulations

The following items are covered under the Labour Standards Act and Regulations:

Vacation with Pay
Public Holidays
Hours of Work
Minimum Wage
Wage Protection
Maternity Leave
Employment of Children
Notice of Termination
Records
Complaints

4.4.1 Observations RE: General Provincial Regulations

For all intents and purposes the interprovincial motor carrier industry operating in and out of Newfoundland has uniformity with the other Atlantic Provinces in respect of general provincial regulations. The vehicle size and weight are almost uniform; there is full reciprocity in respect of vehicle registrations; Newfoundland has adopted the Interprovincial Sales Tax Arrangement; fuel taxes are paid on fuel consumed in Newfoundland; and interprovincial motor carriers are governed by the Canada Labour Code.

Chapter 5

SUBSIDIES RELATED TO THE NEWFOUNDLAND MOTOR CARRIER INDUSTRY

5.1 Atlantic Region Freight Assistance Act

Effective July 15, 1969, under the Atlantic Region Freight Assistance Act (ARFAA), the for-hire motor carrier industry became eligible for approximately the same level of assistance as the railways on movements westbound from the Atlantic Region to other parts of Canada, that is, a 30% reduction on the Altantic Region portion of the rate.

Effective October 1, 1970, under regulations issued pursuant to the ARFAA, a subsidy of 17½% of the rate assessed became payable to truckers on eligible movements between points within the Atlantic Region. The intra-subsidy was reduced to 15% on December 25, 1974.

The application of the subsidy in relation to truck shipments outbound from the region differs from rail shipments in at least one respect. In the case of the railways, the subsidy is paid to reimburse them for a required reduction in rates, whereas, no such requirement was established as a condition to receiving the subsidy for truckers.

Effective April 15, 1974, under the Atlantic Region Selective Assistance Regulations, a subsidy of 20% over and above the 30% westbound subsidy was established to cover the movement of a selected list of eligible commodities from points in the Atlantic Region to other parts of Canada. This additional subsidy is payable to both railways and for-hire truckers in return for reducing their rates by amounts authorized by the Canadian Transport Commission. Eligible commodities include unprocessed agricultural and fisheries products, along with commodities manufactured in the region for which the full potential for adding value is achieved within the region. The assistance includes the payment of an additional amount to truckers, calculated at 1½% of the total assistance (including the general westbound subsidy), in recognition of the cost of the money advanced through reductions in rates.

A revised subsidy program became effective on September 1, 1978, the key elements of which are as follows:

(1) The amount of selective subsidy remained at 15% in relation to the published rates of the carriers;

(2) The subsidy is paid only in relation to the movement of an approved list of goods that are manufactured or produced in the Atlantic Region;

(3) Commodities not eligible under the selective assistance program receive a subsidy of 7½% under the so-called provisional assistance provision for the one year period which terminated on August 31, 1979; and

(4) To be eligible for the assistance, carriers are required to reflect the subsidy as a reduction in their tariff of rates and, unless otherwise approved by the shipper, to include particulars of the gross freight charges, amount of subsidy and net freight charges on revenue freight bills submitted to the shippers.

5.1.1 ARFAA Subsidy Payments on Newfoundland Traffic

Table 31 shows the amount of Atlantic Region Freight Assistance Act subsidy payments made to Newfoundland Domiciled Carriers, to the total of Atlantic Provinces Domiciled Carriers, to Other Provinces Domiciled Carriers, as well as the total payment to All Carriers in Canada for the Fiscal Year 1979-80, under various categories of payments.

Table 31

ATLANTIC REGION FREIGHT ASSISTANCE PAYMENTS BY REGION - FISCAL YEAR 1979-80 [27]
(X $1000)

Subsidy Programs	To Newfoundland Domiciled Carriers	To Total Atlantic Provinces Domiciled Carriers	To Other Provinces Domiciled Carriers	Total Canada
Atlantic Region Freight Assistance	141	2 871	4 659	7 530
Atlantic Region Selective Assistance	16	1 167	1 404	2 571
Atlantic Region Special Transportation Assistance	202	841	118	959
Atlantic Region Special Selective Assistance	2 235	17 762	5 195	22 957
Atlantic Region Provisional Assistance	442	3 358	359	3 717
TOTAL	3 036	25 999	11 735	37 734

Table 31 shows payments made to carriers by province of domicile only. It does not show payments related to traffic to, from or within, for example, Newfoundland. For instance, a Nova Scotia domiciled carrier could claim payments made on intra-Newfoundland traffic and such payments on the statement would be included with Nova Scotia domiciled carriers.

For comparative purposes, the total Atlantic Region Freight Assistance Act payments made in the two preceding fiscal years are as follows:

Table 32

ATLANTIC REGION FREIGHT ASSISTANCE PAYMENTS BY REGION - FISCAL YEARS 1977-78 AND 1978-79 [27]
|X $1000)

Fiscal Year	To Newfoundland Domiciled Carriers	To Total Atlantic Provinces Domiciled Carriers	To Other Provinces Domiciled Carriers	Total Canada
1977-78	2 386	18 795	6 704	25 499
1978-79	3 288	26 358	10 020	36 378

5.2 Subsidies to Gulf Ferry Operations

The Report of the Commission of Inquiry into Newfoundland Transportation dealt quite extensively with an assessment of the Gulf Ferry operation. There are three distinct services operated by the vessels serving the Gulf: (1) the carriage of passengers and passenger related vehicles, (2) the carriage of commercial trucks, and (3) the carriage of rail cars. These ferries provide the major island surface link with the mainland, and are viewed by the motor carrier industry as continuations of the Trans-Canada Highway.

A major problem associated with vessel adequacy is the ability of the present fleet to handle truck traffic especially during the three month peak tourist season when long waiting times are experienced by truckers.

The Sullivan Report states, [28] that the "Gulf Services are the most costly element in the Newfoundland transportation system and since the revenues generated account for only a small portion of the total costs, large subsidies are required by the Ministry of Transport." The report goes on to state that: "Since 1959, and up to 1975, there have been dramatic, if not alarming, increases in the yearly subsidy requirements of the Gulf Operations."

The Sullivan Report states [28] that for tractor trailer movements on the Gulf ferries, the subsidy payments are of the order of magnitude of 82% of the allocated unit costs of operation.

A more recent study by the Economic Council of Canada developed transportation subsidies on Newfoundland traffic based on unpublished data by Transport Canada. Table 33 sets forth this information for the fiscal years 1977-78 and 1978-79.

Table 33

TRANSPORTATION SUBSIDIES ON NEWFOUNDLAND TRAFFIC - FISCAL YEARS 1977-78 AND 1978-79 [20]
(million dollars)

	1977-78	1978-79
Canadian National Railway loss on Newfoundland railway, (Express and Roadcruiser services)	27.6	28.7
Transport Canada Expenditures		
Gulf Service	48.6	54.5
Argentia Service	2.2	7.2
Coastal Boat Service	25.5	28.8
Strait of Belle Isle	-	0.5
Coastal Ferries	2.1	1.3
Other Coastal & Gulf Subsidies	1.1	1.1
Newfoundland Steamship (direct shipping to Corner Broo. - St. John's)	3.8	3.9

Recommendation No. 80 of the Sullivan Commission states (Appendix):

> "That in principle, the Gulf Crossing should be treated as the equivalent of a road crossing, with rates for basic travel charged accordingly, and extra services provided on a user-pay basis where possible, and that this principle be applied to the Argentia service when feasible." This recommendation is explained more fully in the report which states: [28]

"Truckers should be charged a rate based on the equivalent cost of operating on 90 miles of road." (The 90 miles of road refers to the North Sydney-Port aux Basques service.)

The Atlantic Provinces Trucking Association (A.P.T.A.) in a recent brief to Transport Canada stated that "the recommendations of the Sullivan Commission with respect to ferry rates for trucks on the North Sydney-Port aux Basques and Argentia services be implemented". The brief of the A.P.T.A. also details its views on costing considerations in respect of ferry services.

Chapter 6

VIEWS ON CONTINUED NEED FOR REGULATION OF MOTOR CARRIER INDUSTRY IN NEWFOUNDLAND

The subject of the extent of regulation of the motor carrier industry and its continued need is being actively debated in Canada. This debate has been spurred on by the many hearings and discussions both prior to and subsequent to the passage of the U.S. Motor Carrier Act of 1980.

Prof. Garland Chow, Assistant Professor of Transportation, University of Maryland, presented a paper to the Canadian Transportation Research Forum in June 1980 in which he stated that: "No one policy direction, such as less regulation or more regulation may be appropriate. The best policy for each segment of trucking and for the economic conditions in different transport markets may differ substantially." He based his conclusion from analysis of the many studies done in the United States on intrastate experience. His conclusion is that "there are deficiencies in the review techniques" of the studies analyzed which "have not proved anything new but have expanded our appreciation of the different economic situations in each state."

The Economic Council of Canada released Working Paper No. E/II entitled "Motor Carrier Regulation: Institutions and Practices" in August 1980, prepared by F.P. Nix and A.M. Clayton. Nix and Clayton feel "that there is a policy vacuum. There is considerable ambiguity as to why regulation exists, and what the boards are supposed to be accomplishing both in general terms and with respect to specific policy issues." They note that "regulators typically react to events, and that developments occur in an incremental manner. The result is that motor carrier regulation has developed a momentum of its own. In the process, fundamental questions about the purpose of regulation and the direction of government policy in trucking have remained unanswered."

Most articles written currently on the subject of regulation versus deregulation are generally written from the perspective of the fairly intense competitive conditions of the motor carrier industry in heavy density areas, and from the perspective of a relatively mature motor carrier industry.

The motor carrier industry in Newfoundland, while growing rapidly in the past ten years or so, is far from being in the same state of maturity as in other parts of Canada and in the United States. Thus it is essential to look at the continued need for the regulatory process in Newfoundland from the perspective of conditions as they exist within Newfoundland.

The following major items emphasized by the Sullivan Commission must be taken into consideration in an assessment of the continued need for the regulatory process of the motor carrier industry in Newfoundland:

(a) Condition of Highways - The Trans-Canada Highway was only completed in 1965 and has had a great deal of upgrading on it since that time. The Sullivan Commission reported that: [1] "The secondary trunk roads are in need of massive upgrading to provide good community access and allow for a least cost method of good transport."

(b) Gulf ferries - It was only in 1970 that the Gulf ferries were able to handle standard tractor-trailer units on a roll-on roll-off basis.

(c) Evolution of Motor Carrier Industry - The Sullivan Commission came to the conclusion that: "The trucking industry more than any other mode of transport has been in the process of evolution in this province and perhaps has not even yet arrived at a stabilized state. The industry as a whole has been fragmented, with many small firms entering and leaving the business on a routine basis. This of course has meant that reliability and dependability were low and in fact, it has been difficult to provide service at all to many parts of the province." [1]

(d) Density factors - The Sullivan report states [9] that for the more populated centres of the province, competition for intra-provincial traffic is good and is reflected in the rate structure. For the remote areas, in addition to lack of competition, maintenance costs are usually high and as a result, rates are generally high. On interprovincial traffic, there is still an imbalance between incoming and outgoing freight and as a result rates have to be set to cover the costs of hauling empty returns.

(e) Importance of Fishing Industry - The Sullivan Commission stated [13] that it is satisfied that the fishing industry now constitutes one of the brightest hopes for industrial strength for the province, and that examination by the Commission shows that currently, the fishing industry in Newfoundland is almost totally dependent on road tractor-trailer transport for the export of fish off the island of Newfoundland to North American destinations.

(f) Atlantic Region Freight Assistance Act - The Sullivan Commission stated that: [9] "The extension of the freight rate subsidy by the Atlantic Region Freight Assistance Act to trucking has been, where applicable, a very valuable aid in making trucking more competitive with rail." However, Newfoundland has substantial volumes of fish movements to the United States which are not covered under the ARFAA.

(g) Sullivan Commission recommendation on regulation of motor carriers - Recommendation No. 46 of the Sullivan Commission (Appendix) states: "That the Federal Government ensure that federal regulation of the trucking industry is carried out in such a manner as to be aware of and responsive to the necessity of maintaining an extraprovincial flow of fish products from Newfoundland." Fish movements vary considerably during the course of the year. During peak periods, suitable empty trailers in adequate numbers are not always available, thus the concern for the need to protect the interests of the fishing industry.

(h) Recommendation No. 47 states "That the Provincial Motor Carrier authority consider the feasibility of requiring the provision of service to certain areas and scheduled deliveries as a condition of granting licenses, particularly for intra-provincial services."

In addition to considerations emphasized by the Sullivan Commission, there are a number of other considerations outlined in Chapter 2 of this report. This chapter provided a brief profile of the motor carrier industry operating in Newfoundland, the highlights of which are as follows:

(a) There has been a substantial increase in the number of motor carrier units operating in Newfoundland during the past decade. The trend has been for the extraprovincial carriers to become much more predominant in intraprovincial movements in the past few years. An internal study of the province recently expressed great concern about the problem of dominance by out-of-province carriers.

(b) There is a substantial imbalance of traffic for the extra-provincial carriers - much greater revenues inbound than outbound.

(c) In general terms, the Newfoundland Domiciled Carriers are less profitable than their counterparts in Atlantic Canada and in Canada as a whole for the period 1975 to 1978. The exception was Class II carriers who tend to show better financial returns, but these carriers are not large in numbers.

(d) The Newfoundland Domiciled Carriers showed a steadily deteriorating debt-equity ratio during the period 1975 to 1978, compared to a less severe deterioration for the other Atlantic Provinces Domiciled Carriers, and no deterioration at all for All Carriers, in Canada.

(e) Carriers domiciled in Newfoundland are smaller in size than elsewhere in Canada especially for intraprovincial movements. Larger Canadian carriers play a more prominent role in extraprovincial movements.

Comprehensive regulation of the motor carrier industry under the Motor Carrier Act in Newfoundland commenced in 1970. The essential difference in the regulatory process in Newfoundland compared with the other Atlantic Provinces is that Newfoundland may fix or approve freight charges, compared with only rate filing requirements elsewhere in Atlantic Canada.

In light of all the factors highlighted above, supported by observations of the Sullivan Commission, there appears to be very sound and practical reasons why regulation of the motor carrier industry is still required in Newfoundland. The motor carrier industry, in its present stage of evolution, is less profitable and less financially viable than in other areas in Canada. The industry has problems of light density population, poorer road conditions, long distances to travel, greater imbalances of traffic, and the like. The general public is far from being overserviced in many areas of Newfoundland. Thus it would appear that in the protection of public interest in Newfoundland both the motor carrier industry and the general public still need guidance from the Board of Commissioners of Public Utilities under the Motor Carrier Act and Regulations.

It is clear that the Atlantic Region Freight Assistance Act has been a valuable aid in making trucking more competitive with rail by assisting in the growth rate of the motor carrier industry. From analysis of the financial data of domiciled carriers in Newfoundland, or in fact from financial data of domiciled carriers in Atlantic Canada, it does not appear that the subsidy has made such carriers financially well off.

This report has pointed out that the motor carrier industry in Newfoundland in its present stage of evolution is still less profitable and still less financially viable than in other parts of Canada, as well as the fact that the general public is far from being overserviced in many areas of Newfoundland. It is the belief that these facts cannot be assessed to the regulatory process itself. In support of this statement, the Sullivan Commission stated that "the retardation and generally poor development of the interprovincial trucking industry has been due at various times, within the last decade, to one or a combination of (1) the inability to carry large size trucks on the Gulf ferries, (2) the lack of a completed Trans-Canada Highway, (3) the impediment to truck travel on the Gulf after vessels were put into service, i.e., waiting times and high rates, and (4) a rapid deterioration of the Trans-Canada Highway soon after it was officially completed. From the intraprovincial standpoint, the lack of good, if not totally suitable roads, giving rise to high maintenance and operating costs plus the sparse and scattered populations resulting in the carriage of small payloads, has hindered the rapid development of a good intra-trucking service". [6] It appears that in the light of all relevant information available to date, and supported as well by the conclusions of the Sullivan Commission, that continued regulation of the motor carrier industry in Newfoundland is in the public interest.

APPENDIX

SUMMARY OF RECOMMENDATIONS IN THE SULLIVAN REPORT ON THE MOTOR CARRIER INDUSTRY

The Sullivan Report [12] sets forth a summary of recommendations as follows:

"46. That the Federal Government ensure that federal regulation of the trucking industry is carried out in such a manner as to be aware of and responsive to the necessity of maintaining an extraprovincial flow of fish products from Newfoundland." The reason for this recommendation is stated in the report [13] which points out that in the case of Newfoundland, all road freight leaving the province must, in order to reach the central part of Canada and the United States which constitute the main markets for Newfoundland exports, pass through one or more of the other Atlantic Provinces. Since regulation of the federal jurisdiction for extraprovincial operation through these provinces is conducted by the respective motor carrier boards in each province, acting according to their separate provincial principles, there exists a potential for variation in the standards applied under the federal legislation.

"47. That the Provincial Government ensure that its officials are available to give evidence to regulatory authorities concerning the need to ensure adequate supply of carriers licensed to transport fish products from Newfoundland." The reason for this recommendation is stated in the report [13] that as a result of its investigations, and as well as from the representations made during the public hearings, the Commission is satisfied that the fishing industry now constitutes one of the brightest hopes for industrial strength for the province, and that examination by the Commission shows that currently, the fishing industry in Newfoundland is almost totally dependent on road tractor-trailer transport for the export of fish off the island of Newfoundland. The report further states that it is clear that the fish producers intend to continue to use the truck transport mode rather than to voluntarily switch to any of the other modes.

"48. That regulatory bodies immediately institute a program of required reporting by, and data gathering relating to, the trucking industry so as to develop sufficient statistics to enable the industry to be evaluated on an equal basis with other modes." The reason for this recommendation is pointed out in the report [14] which states that only in this way will continuing evaluation of the industry be possible, together with the ability to take the necessary steps to ensure that the industry is placed on an equal footing in intermodal competition.

"49. That provincial and municipal holidays be gazetted in advance to provide information to carriers as to possible loading and unloading difficulties affecting scheduling of trucking services."

"50. That a comprehensive code for carriage and labelling of dangerous goods be developed and immediately implemented." (Now implemented.)

"51. That the Federal and Provincial Governments cost share on a fifty-fifty basis the provision of motor carrier inspectors to continue to adequately police the licensing and regulatory standards set by both governments." The Sullivan Commission was presumably aware of the rapid increase in illegal trucking taking place in other parts of Canada and the need for increased policing.

"52. That development of a Newfoundland based fleet of temperature controlled freight vehicles be encouraged." The report states [14] that the purpose of this recommendation is that it is essential that at least a minimum provincial capacity be established with appropriate licenses in order to meet fluctuations of demand which might occur from time to time in the export of fish products to Mainland and United States markets.

"53. That upon establishment of an adequate road system in Labrador, licensing requirements for the carriage of truck freight in Labrador be such as to encourage development of a truck freight service equivalent to that available on the Island."

"54. That the Province implement an "assumed use" fuel tax similar in application to that in effect in other provinces, and that the proceeds from such tax be designated for highway maintenance and upgrading uses." The report states [15] that the Commission feels that the implementation of this tax would increase provincial revenues and would ensure that motor carrier operators contribute a fairer proportion of expenditures within this province related to contracts for carriage arising out of Newfoundland operations.

"55. That consideration be given to establishment of central warehousing facilities in major centres." The report dealt with this recommendation more extensively in Volume II, which states that the regular scheduling of freight delivery services, both on the corridor route across the island and on the trunk roads to the smaller communities, should be aided by such depots which would provide a central location for the regular interchange of freight between smaller and larger carriers. The inability of the small carriers to provide their own warehousing facilities now adversely affects interlining and regularly scheduled trucking services.

"56. That further expansion of Canadian National Transportation Limited trucking routes and services be permitted only after establishment of competitive services or where private trucking is not able to adequately service particular areas of the Province." The reason for this recommendation is set forth in the report [16] which states that the Commission feels that a potential monopoly situation should be discouraged, and that further expansion of CNTL routes in Newfoundland should be postponed until it is clearly shown that such expansion is warranted, either by the private trucking industry having reached such a stage of maturity that it can compete on even terms with a Crown corporation, or by clear evidence that private carriers are unable to provide adequate services to some areas of the province.

"57. That the Provincial Motor Carrier Authority consider the feasibility of requiring the provision of service to certain areas and scheduled deliveries as a condition of granting licenses, particularly for intra-provincial services." The Commission is of the view that more and better service is needed especially to outlying areas.

"58. That every effort be made to reduce or eliminate processing delays for federal payment of trucking subsidies." The purpose of this recommendation is stated in the report [12] which points out that the subsidy is treated as an integral part of the rate structure and any delay in receipt of subsidy payments constitutes a business expense to the trucker which must be recovered through charges to the consumer.

NOTES

[1] Report of the Commission of Inquiry into Newfoundland Transportation. (Sullivan Commission Report), Volume I, July 1978, p. 119.

[2] Ibid., p. 49.

[3] Ibid., p. 52.

[4] Ibid., pp. 79-83 and pp. 165-166.

[5] Ibid., p. 82.

[6] Ibid., p. 120.

[7] Ibid., p. 121.

[8] Ibid., p. 157.

[9] Ibid., p. 122.

[10] Ibid., p. 123.

[11] Ibid., p. 144.

[12] Ibid., p. 243.

[13] Ibid., p. 239.

[14] Ibid., p. 241.

[15] Ibid., p. 242.

[16] Ibid., pp. 242-243.

[17] Statistics Canada. Motor Carriers - Freight and Household Goods Movers, Catalogue # 53-222.

[18] Statistics Canada. Road Motor Vehicles Registrations, Catalogue # 53-219.

[19] Statistics Canada. For-Hire Trucking Survey, Catalogue # 53-224.

[20] Economic Council of Canada. Newfoundland: From Dependency to Self Reliance, 1980.

[21] Transport Canada. Operating Costs of Trucks in Canada.

[22] Board of Commissioners of Public Utilities. Annual Report, December 31, 1979.

[23] Recommendation No. 57 of the Sullivan Report as shown in the Appendix of this report.

[24] Ontario Trucking Association. Submission to the Ministry of Transportation and Communications, Province of Ontario on Private Intercorporate Trucking, December 17, 1980.

[25] Economic Council of Canada. Studies of Trucking Regulation Vol.II, Working Paper No. 3, August 1980.

[26] Atlantic Provinces Transportation Directory, 1979.

[27] Records of the Canadian Transport Commission.

[28] Report of the Commission of Inquiry into Newfoundland Transportation. (Sullivan Commission Report), Volume I, July 1978, pp. 129 and 251.

[29] Province of Newfoundland. Highway Traffic Act.

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Transportation of Dangerous Goods Code.

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